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Lighting Fixtures

There recently has been considerable discussion in electrical circles over the proposal to equip wall and ceiling fixtures with plug connections so that they may at any time be removed at will. The talk has been for and against the idea—mostly in favor of it.

As the electrical industry is one that has not yet reached the peak in discovery and invention, new devices and improvements on old ones are as frequent in appearance as are the days of the year. And so in the case of plug fixtures, manufacturers have been busy planning, designing and experimenting on devices to best answer the purpose.

As a result there are several of these removable, or changeable, or detachable—what are they to be called?—lighting-unit devices ready for the market. It will not be long until Mrs. Housewife, when she removes from here to there, will detach her lighting equipment and take it with her, along with her other detachables and removables.

The question is, will they fit? Or will it be that so many different styles are placed on the market as to prohibit their use? For if the new receptacle does not fit the old plug, then the device will go into the junk along with the appliances having attachment plugs of a different character.

Standardization is now called for by the public. It is demanded. It may be that the public was more easily imposed upon in the past than it is at present. Such a condition certainly obtains in the electrical industry. The public now demands standardization.

Contractor-dealers realize the necessity for a universal form of the device to be used for this new lighting unit, perhaps more than any other branch of the industry. They meet the public face to face. They hear its criticisms and complaints, and in the case of standardization their sympathies are with the public.

So far as the name of this new device is concerned, it matters not whether the trade calls it furniture, utensil, appendage, unit, or what not, the public knows it now as a lighting fixture and cannot be expected ever to call it anything else. Let it be removable or remountable, attachable or detachable, separable or disjoinable, or anything else to designate changeability. But it must be standardized.

Then tell the public that it is a lighting fixture which they can have installed by an electrical contractor and that it can be taken down like the kitchen clock, or put up like the hallroom curtain—only easier—and tenants, landlords, householders, builders, will call manufacturers blessed.

The Building Industry

It has been said that the average contractor-dealer does not give enough of his attention and thought to the building industry of which he is, or should so consider himself, an important constituent.

The electrical contractor is as much a part of the whole in building circles, now that the electrification of buildings is practically without exception, as any other kind of contractor engaged in it. He is entitled to a seat in the councils of the building industry, and doubtless would be welcomed there.

However, it may be that he is yet too modest to come forward and make the declaration that would entitle him to a voice in such conferences. He is comparatively so young in the field of construction that he hesitates when it comes to making himself known. He awaits a call from the more experienced members of this field to present himself and take his rightful position in the building industry.

There has now been formed what is officially termed the National Congress of the Building and Construction Industry. This came as a result of a conference held in the city of Chicago last September, after a previous meeting at Atlantic City. In December representatives from the various elements of the industry conferred in Boston, and in January of this year a committee of twenty-four was appointed to investigate and study the questions that are perplexing the building industry as a whole.

At the Baltimore Convention of the National Association of Electrical Contractors and Dealers last October an appropriation was voted by the Executive Committee toward the furtherance of this cause, so it goes without saying that every member of that organization has an interest in the work of this Congress, whether he realizes it or not.

But there is an urgent need of the membership giving more attention to this matter. There is no longer any doubt but that the many different elements in the building industry have been working at cross purposes. There has not been unified representation. Too often electrical interests therein are neglected or entirely overlooked, as are other important factors.

It has been said that this new Congress should become a permanent institution. It is designed to create and direct research agencies; to promote the spirit of harmony throughout the various elements of the industry; to conduct a scientific study of subjects relating to it; to devise plans

for coördinating the many interests; and to so regulate the entire industry that it may better serve the public.

The contractor-dealer should lend his assistance in attaining these worthy ends. He should take up his rights and at once become an active working part of the great building industry. He now has an opportunity of doing this through this new Congress.

Already there have been conferences held in Omaha, Boston, and New York City. The executive board of the new Congress urges the importance of calling similar meetings in Chicago, St. Louis, Pittsburgh, Philadelphia, Cleveland, and New Orleans. Local electrical contractors can lend valuable aid in answering this call, and it is largely to their interests so to do.

Progressive Steps

The time is now at hand when a contractor-dealer business can be opened and developed on scientific principles. Certain precedents have been established. The methods of successful contractor-dealer stores can be followed. Patterns now are plentiful, whereas in the early days of this branch of the electrical industry such stores might be counted on the fingers of one hand and were hundreds of miles apart.

This condition would apply to any new industry. It is well within the memory of most of us when automobiles—we called them by their full names then—had no place that they knew as home. There were no palatial showrooms for them as there are in the present day.

Time was when the silent drama—which is the pressman's name for movies—hung up a dirty sheet abaft the stern of an abandoned storeroom on a side street and exhibited thrillers at five cents a head. Look at the motion picture theaters nowadays.

It is the way of evolution. The growth and development of great things come through a slow and tedious process. At times it seems discouraging to those who sit by and await results. There is no apparent progress.

So it was with electricity. The thing was literally grabbed out of nothingness; it was confined in something that was hooked up to some kind of wire, where it passed through to a filament enclosed in a glass bulb, and the result was electric light. Then followed the process of evolution in the discovery and invention of things electrical.

There were no precedents then. Men still live who performed with their own hands the first wiring job they ever saw. Of course they had to feel their way. Nobody was cocksure of the result being correct. It was pioneer work in those days and errors could easily be excused.

But not so today. The pace has been set—the way is clear. The merchant-contractor who conducts a ramshackle, rundown place of business must be blind. Examples of spic and span electric shops may be seen in every city, town and hamlet. Efficiency is to be found in every one of them—management, salesmanship, financing—and all performed by men who have learned from the ground up.

So there is no further excuse for mistakes. The contractor of today can learn to be an efficient business man. The way is open—there are numerous sources of information. All it requires is observation and application. And so with the local merchandiser of electric conveniences for the household. He can learn to be a real retailer without go-

ing out of his own town if he looks around and sees what others are doing.

National Associations

It used to be said that of the making of books there is no end, and of recent years it can as truthfully be said that of the founding of National Associations there is no end—they seem to be as numerous as books.

Not alone in the business world are organizations formed for the betterment of those interested, but in various educational lines, in social and religious circles, in labor and employer activities, in insurance and thrift movements, in child welfare, in the efforts to prolong life and in the endeavors to meet death, there are one, two, ten, and scores of organizations representing different classifications in each line.

In the industries alone there are hundreds of National Associations, if not thousands—many times more than are represented in the number of industries, for each one of the many is divided into organizations of manufacturers, wholesalers, retailers, and consumers, while each of these separate classifications is subdivided into other bodies that take in accounting, selling, buying, advertising, managing, shipping, exporting and importing, along with many other ramifications too numerous to mention.

With all of these examples of organized effort, of successful coöperation, of progressive coördination, it may be said without contradiction that it pays to organize. And yet there are those in the young and prosperous electrical industry that express their doubts as to the good to be gained through the support of the National Association to which they belong.

On another page of this issue there is published an address recently delivered before the Toronto district, Canadian Division, of the National Association of Electrical Contractors and Dealers, by the secretary-treasurer of that organization. It ably sets forth the purposes of that body. It explains how the National Association functions. It presents statistics that every merchant-contractor should study with serious thought. It describes the methods pursued by various committees of the governing body, and without so much as indicating a hint of pleading for the support of the membership, as a whole it becomes a most convincing document which will refute any argument that can be made against the National Association.

Contractor-dealers should carefully read the article in question. Members should read it; officers of state and local branches should read it. Nothing we have seen so clearly presents the case of the National Association—and surely all members should familiarize themselves with the workings of this important body to which they belong.

Unworthy Advise

We have many times cautioned electrical contractors against substitution in electrical installations. Every job should be so substantial—so strong and durable—that it will at once be recognized as the finished work of an expert. It should possess the professional appearance—as near perfect as high class material and experienced workmanship can make it.

Now comes a more or less esteemed contemporary and

publishes in its columns a suggestion from a contributor which shows how to work out a substitute for a set of three way switches.

The correspondent in question admits that one of the most useful switch control features in a residence wiring job is the three way switch control for the upstairs hall light, but says that many of its advantages can be secured by placing the upstairs hall light on the ceiling pull cord switch, allowing the cord to reach downstairs, passing through one or more screw eyes so that it may be suspended in a convenient place in the lower hall.

Could anything be more amateurish? At best it would be nothing more or less than a patchwork job. The quality of the cord is not set forth in the suggestion, but it is presumed that any kind of string taken from the grocer's or butcher's packages would do. The idea is to save expense, and while the contributor does not mention it, the screw eyes can probably be found in the family tool chest—or a couple of old wire nails might be used and bent to hold the cord, thus saving the price of screw eyes.

The whole proposition is preposterous and the cost of three way switches does not justify such nonsense. It is all right for an amateur to rig up his hen coop with his own ridiculous contraptions—there are no organization or industry influences to keep him from it. But when the electrical contractor is advised to perform such makeshift jobs, it is going too far.

The industry has passed the point where careless installations are tolerated. Even the public has been taught to recognize faulty construction. At the present time nothing but first class work can get by, and the advocates of patchwork should confine their efforts wholly to amateurs. Suggestions for using cheap makeshifts in electrical installations should have no place in the electrical press.

Sound Logic

Last month there was held in Buffalo, New York, the Second Annual Lighting Fixture Market, the first one having been held in Detroit last year. Organized manufacturers of fixtures and glassware and dealers in these wares are responsible for this enterprise, which this year reached the proportions of an event that marks an epoch in the industry. It was an overwhelming success judged from every viewpoint.

In urging the attendance of his members to this event, C. F. Hofrichter, secretary of the National Council of Lighting Fixture Manufacturers, in a bulletin sent to them, hit the nail on the head in a way that might profitably be considered by members of the National Association of Electrical Contractors and Dealers, whose annual convention also will be held in Buffalo next July. Mr. Hofrichter said in part:

"What are you planning to do at Buffalo? Does the Annual Convention of your industry mean anything more to you than a good time? Surely, you are going to meet friends, you are going to mingle among men whose interests are akin to yours. Also are you going with a fixed determination that this is the one time in the year that you can accumulate the most information about your own industry?"

Then in touching upon a point which has become a subject to handle with care, he proceeds: "Are you planning to attend every business session and bring to it a clear

rested brain that has enjoyed a comfortable night's rest and that is not befogged by a stomach which has been too well acquainted with John Barleycorn?"

There certainly is thought food—if not drink—in that pointed question, as there also is in the concluding advice:

"Begin to plan now that you will attend every business session. Begin to plan now that you will take at least an interested attitude in the discussions and if possible lend some helpful suggestions. So far as you are able, see to it that the general conduct of the convention and market will be such as to raise the standards of thinking in this industry as well as about the industry."

More power to an organization officer who in this manner urges his membership to aid in carrying out a successful association affair. That it was a success is largely due to such efforts.

Ready for Business

Heretofore it has been the custom in the merchant-contractor end of the electrical industry for a man to say that he was all ready for business when he put his shingle out as an electrical contractor or opened the doors of a new retail establishment.

All that seemed necessary in either case was a kit of tools or a stock of appliances. Nobody ever considered that business experience was an essential, or that lacking this, the proprietor of a new commercial enterprise should establish certain safeguards to guide him along the uncertain paths of progress.

While there are a number of elements that go far toward making or breaking the novice in business, among the more important ones are finance and accounting—and these two are analogous to quite an extent. The man whose mind naturally turns to finance will invariably evolve some way of keeping a record of his transactions; while the one with a natural bent for accounting will more readily grasp the financial end of the business.

When a contractor-dealer begins to operate without a knowledge of either of the essentials mentioned, all he needs to do now is to apply to National Headquarters for information concerning the New Business Record. It will not raise funds for him to finance his business with, but it will show him where the money goes, how it goes, what it goes for, and what there is left—all of these questions having a strong bearing on future success.

Successful business men agree that business records are a necessary requisite in the conduct of any kind of business. The electrical contractor will find the New Business Record of the National Association as useful in his line of endeavor as will the dealer in electrical supplies, and neither one will be able to develop extensively without recording each and every transaction in a systematic manner.

The National Association's Standard Accounting System is designed for those who maintain a bookkeeping department and a description of its operation is set forth in other pages of this issue. But if the merchant-contractor is a one man institution, or one that does not employ a bookkeeper, the Business Record will answer all purposes.

Get ready for business! Start right with the New Business Record, and when the business grows into the need of an accounting department, the original method can be easily transferred to the Standard Accounting System.

Financing a Contractor-Dealer's Business

BY PAUL C. BURRILL

The Secretary of the Herman Andrae Electrical Company of Milwaukee
Read the Following Paper Before the State Convention in that City in January

An electrical contracting business falls naturally into three departments: Finance, Sales, and Service. Most electrical contractors have begun their business with department number three. They have felt that they understood electrical construction, and were able to give customers *service*, and on this have attempted to build up a business.

After some years of dabbling in business in this manner, they realize that *Sales* is an important end of the business, and either organize a sales department, or devote a certain part of their own time and energies to this particular end of their business. Then we have a business two-thirds complete with both departments distinctly recognized, but we still have little or no attention paid to *Finance*. It is only after a business has grown with distinct sales and operating departments to such proportions that the question of finance is forced upon him, that a contractor realizes that this is a vital factor in his business.

In the beginning he usually carries these matters in his head or on the back of an envelope stuck on a nail near the window, and it is only when he realizes how much he is losing by these methods, that the contractor gives careful and distinct attention to the first department of his business, finance.

Let us consider some of the big businesses of the country and see what attention they pay to finance. Look at a railroad. Does the organization of a railroad begin with its conductors and switchmen, does it begin with its ticket sellers and solicitors, or does it begin in Wall Street with its promoters and bankers?

Consider a manufacturing business. Is the works department the first one organized, with its superintendents and workmen, is it the sales department with the sales manager and commercial travelers, or is it Department One? Is not the business first conceived by the general manager, who then consults the banker and the bond market in planning his business? The more *our* business grows, the sounder it gets and the better we develop it, the more attention we are going to pay to Finance, that is,

getting and keeping the money on which the entire business is based.

Now, this department of a business has its subdivisions. The two natural subdivisions are *getting* the money and *keeping* it. Keeping the money is a matter of bookkeeping. I don't believe it is expected that I should discuss what sort of books a contractor should keep. This will depend entirely upon the

doing a monthly volume of \$10,000. This is at least a two or three man business. I mean by that, that it must have two or three responsible, active, partners or managers, as one cannot carry the responsibility for a business of this size without delegating considerable authority to responsible subordinates.

I imagine this business will have an office force of five or six people outside of two or three who carry the chief burden, and I am figuring that this is a diversified business such as our associations, our trade magazines, and our jobbers and manufacturers have been encouraging us to develop during the past few years.

This business has a fair proportion of construction work, employs 10 to 20 electricians, conducts a store, canvasses for appliances, and serves industrial plants with supplies. It is not a manufacturing business and it is not a jobbing or distributing business.

I am using this figure because it is a round number, easy to remember and work from, and I think most closely approximates the average of our membership, at least the ideal towards which our businesses point. It is the basis on which our company operated for quite a number of years. This business amounts to \$120,000 a year or approximately \$1,000,000 in eight years.

Let us try to approximate the amount of capital used in this business. We will not assume that the contractor owns the building. This is not ordinary business practice. We recognize that real estate is entirely distinct from commercial business, and we have rented a building under a fairly long lease. This lease should not be so long nor the rent so high as to make the aggregate rental payments run into too considerable a proportion of the total net assets of the business.

We will say the lease should run from three to five years, and the rental should be in the neighborhood of 1% of the amount of business done. The analysis of costs of an electrical contractor furnished by our National Association says that the rental, light, heat, and power, of a business shall approximate 4% of the volume.



Paul C. Burrill

nature of his business. This subject includes cost accounting, auditing, paying bills, and invoicing.

The subject I wish to outline here is the other part—*getting the money*, and the first question that naturally arises is, how much is required? I propose to set up a model business and work from this. If this business is double yours, divide my figure by two. If this business is half of yours, multiply this by two and make a comparison with your own affairs. When I am finished I should like to have you be frank in criticising these figures, and out of the discussion I hope we can get a feeling of whether or not our business is properly provided for.

Average Business as Example

I propose to consider a business

Equipment and Merchandise

Excluding the building, the first item of investment to be covered is furniture, fixtures, tools, automobiles, and other equipment. This will vary a great deal according to the particular nature of the business, and its particular location in the city in which it is carried on. Thus a downtown business with emphasis on merchandise sales, would run heavier in fixtures and appliances than a business devoted more to construction work, and located in an industrial neighborhood where plainer equipment would suffice. Let us provide for this business two or three automobiles at say \$3,000, and let us provide office furniture and other equipment of \$7,000.

The second thing to be provided is merchandise. The amount and volume of this merchandise is going to vary with business conditions. It is going to be necessary to carry more in times such as we have had during the past three years when we could not depend upon our jobbers and manufacturers to furnish us with material immediately. In normal times when these organizations are performing their functions properly, our stock can be reduced.

A contractor should never attempt to speculate in material, buying a year's supply because he thinks the price is going to go up, or because the salesman induces him with a little longer discount. If he attempts either of these he is invading a field entirely distinct from construction and merchandising. He is becoming in a small way a jobber and an investor. He should not attempt this until he has a definite fund for such a purpose, and can consider that with a certain proportion of his capital he is speculating.

The main question in providing a certain amount of merchandise is turnover. We have heard a good deal of this in the past few months, and the merchant who can get a turnover in 30 days is going to be more successful than the merchant who takes 180. I do not admit that turnover can increase materially the amount of business done by the contractor. There is in every community a certain amount of business for each man, and intensive sales or advertising or a change in buying policy alone is not going to enable him to double his volume of billing, and thus cut his turnover in two. I think rather that business as fixing turnover is a question of reducing stock.

I believe all of us will find our business to be between the 30 day basis and the 180 day basis, but I believe most of us are nearer to taking six months to turn our stock than we are to taking one. I believe we should expect to get our business on a 60 day basis, but in providing funds to operate a new business a good plan is to estimate your requirements and then double.

We won't go quite that far in this case, but we will assume that our contractor-dealer is going to turn his stock over in 90 days or three months. This means, if his sales are \$10,000 a month, and half of his total cost is merchandise, which I think is a close approximation, that he will have an inventory of \$15,000. This is the figure I wish to use in this connection. I invite your particular attention to criticism of this figure. I believe we can do better. Will you please analyze your business and see if your inventory of merchandise on hand does not run close to one and one-half times your monthly billing?

The third item of investment is office overhead, and that is the amount of work which has been completed and has not yet been billed. The contractors' capital is tied up, the customer has not had notice of his obligations, and naturally has not paid them. I doubt if many contractors can keep their average under a half month's work. In other words, on the 15th of this month did you have billed all the business you did last year? I am going to use this 15 days as the basis of delay in billing this, and add to our investment for this item \$5,000.

The fourth item of investment is accounts receivable. This does not include accounts which have been settled by notes, but merely the open accounts on the books. Again, the nature of a business is a factor of the amount we are going to use. If we have a greater number of time payment contracts the proportion is going to be increased. It is not safe to figure on less than 60 days' business being on the books. In our own organization we have for the past year held this figure between 45 and 55 days, but to be safe I am going to use 60 days business here or \$20,000.

Investment Covered

Now we have covered the biggest part of our investment. We have a total of \$47,000. There are going to be other small items such as insurance paid in advance, and rent where our payments

average 15 days in advance, but all of these are insignificant compared to the four items above, so you can safely admit that business should be operated on a net investment of \$50,000 or five months turnover. This is close to the average I have seen in our own business since I have been connected with it. I think we have bettered it most of the time, and most of you can better it by careful attention to turnover or collections, which you will see from what I have said are the most important factors in financing a business.

I will not discuss any further how turnovers or collections can be improved, but these items represent \$15,000 and \$20,000 respectively, or \$35,000 out of the total \$50,000. This is 70% of the total. A man should see the whole of this \$50,000 before he plans his business. There is a little which can be distributed, and which is a natural deduction. Most of our merchandise can be discounted if we settle at regular dates, so that the ten day period can in general be extended to 20 days. Twenty days' merchandise purchases is \$3,000, which the wholesaler will be glad to carry.

Your payroll ledger will, if you settle on Tuesday night for the previous week's work, amount to an average of four days or about \$500, which your employees are carrying. These two amounts should hardly be used to reduce the amount of working capital, but should rather be left in a bank balance. They should certainly be so left if we expect to operate this business on a much smaller capital than we indicated above, and borrow the balance from the bank.

Where to Get Money

We have tried to answer the question of how much money should be provided. Now we will address ourselves to the other question of where to get it. It is needless to say that.

The man who reaches this point in his business and has analyzed his investment carefully, has a problem before him. We will say that he has \$20,000. Is it safe for him to embark on such a scheme as this, or business of this size? Not unless he has the full confidence of his banker and his jobber. He has not a sufficient margin on which to operate, and under these conditions he should go frankly to the banker and show what his net assets are, and consult with him on such matters as he can, telling him at the same time how much he expects the

jobber to carry. He should make the same sort of an arrangement with his jobbers.

If he expects to buy on longer time and not discount his bills he should have definite arrangements to this effect with all from whom he buys, otherwise the seller will expect to have his bills discounted and the contractors credit rating is going to suffer.

The ideal way, of course, is to have on hand the full \$50,000, to operate this business. With 50% of this amount the contractor is going to be in difficulties all the time. To meet his bills he must ask his creditors to wait 60 days. He must borrow a larger amount than the banks really want to carry. In case he is operating on this basis he will probably make some such arrangement as this: He will borrow from the bank \$10,000 either on demand notes or on 90 day notes maturing from time to time, and he will settle with his principal jobber for a certain line of credit and ask him to carry his notes for from 60 to 90 days, settling his invoice, however, when due.

The trade acceptance is the politest way of arranging this credit. In this way the jobber will cover an additional \$15,000 of his deficit. These figures are both more than the banker and the jobber will willingly grant, but these should be the only two persons asked to carry the balance that the contractor does not carry himself. If the contractor has \$35,000 and can reduce these figures to \$7,000 or \$8,000 each, he is going to get a much more ready response from both.

I have not discussed such operations as selling preferred stock and bonds on the open market, as a contracting business rarely develops to this extent, and any funds obtained in this way can be considered a part of the contractor's own original investment.

This completes my discussion on the subject assigned, but there are three closely related subjects which I can hardly avoid bringing before you while I am on the floor. They are the questions of investing employees, of time payment contracts, and of overhead.

Some contractors have made arrangements with certain of their employees to take stock in their organization. This has two advantages. The first is that it increases the net assets of the organization and decreases the amount of money which it is necessary to ask the banker and the jobber to carry, providing the

owner is not in a position to finance his business alone. The second advantage is probably greater, and that is, the employee feels an interest in the business and will assist in stopping those leaks which the owner himself cannot look after.

Now as to time payment sales. All we have to say is, that if we go deeply into this business alone, the accounts receivable item is going to be increased from 60 to probably 180 days, depending upon the length of time we permit our contracts to run. If we sell a washer at \$185, getting \$15 down and \$10 a month, it will take the customer 18 months to pay out, and on an average his accounts are going to be owing nine months.

Our smaller sales can probably be completed in a shorter time, but experience shows that even a ten months' vacuum cleaner contract usually lags a month before it is closed up, and we cannot thus expect an average on this business of less than six months. If the model \$10,000 monthly business were all appliances sold on contract, it would mean than accounts receivable would approximate \$60,000 and the total investment \$90,000. This means a much larger initial investment, or a much longer line of credit.

I do not believe we will find it pays to turn these accounts over to the banks who make it their principal business to carry them, such as the Morris Plan Bank. These people will only loan us in the neighborhood of 70% of the value of these accounts and tie us up pretty strongly with bonds and other conditions, and make us finally responsible for the collection in the end. If we figure right down to a sharp point they are getting between 18 and 23% for the use of their money, and no business man can afford to pay this rate. In this respect the department stores are getting the best of us. If a contractor sets out to do a big appliance business it is going to require so much money to carry his accounts that he soon becomes involved, but the department stores with net assets of a million or more can easily go to the bank and borrow on their general account \$100,000 or \$200,000, sell stocks, or raise the money in other ways, and can carry this business without feeling it.

Dealer Must be Cautious

A dealer going into this business should have his eyes open, and realize that every time he sells a \$157.50

washer on which the customer pays \$15 down, he must pay the jobber \$110 for that washer and the salesmen who sold it \$15; that is, he himself must invest \$125. He gets \$15 back and is \$110 in the hole. He naturally thinks the only way to make this up is to go out and sell another washer, but when these charges go through to the bookkeeper, this gentleman reports that the house is another \$110 in the hole, and this merry circle keeps on until, whether he knows it or not, the contractor begins to get tired of the entire business.

The big department stores do not feel this so long as it is only a small feature of their business, but the dealer feels it at once when he begins to make this the big end of his affairs. One manufacturer tells us that careful analysis shows it costs \$5 to carry a vacuum cleaner account over ten months. This figure covers interest, bookkeeping, postage, printing, and was arrived at after spending more than \$1,000 for expert accounting service. I wonder how long we are going to continue to give this service away for \$2.50 and carry time payments with a 5% addition?

There is one important feature to be considered in connection with overhead expense, namely, that the volume of your business should be worked out closely in connection with your organization and quarters. If you have too big an organization and too large a building and cannot keep it filled up with business, your overhead expense is going to be too high.

As you increase the volume of business certain fixed expenses are going to remain stationary, and your percentage of overhead is going to decrease until you reach the point where your business just nicely fills your building and loads your organization. When you attempt, however, to do still more business with the same building and the same personnel, your percentage of overhead is going to go up again because your clerks are going to get into each other's way, your salesmen are going to interfere with each other, your construction crew is going to stand around waiting for material, and you are going to have untold leaks that are not accounted for.

There is a certain happy relief between the volume of business and the size of your organization which must be maintained in order to get the most efficient results. It does not pay to bite off too much business if you haven't the right people to handle it, any more than

it pays to have too large an organization, and not enough business to carry the overhead.

Two Important Parts

Going back again to my original subject, I would say that of the three departments of an electrical contracting business—Finance, Sales, and Service—the first has had the least attention paid to it, but is the most important of all.

This subject has two parts, keeping track of your money and providing the funds. Funds should be provided for between four and five times the monthly volume of business it is expected to handle. This is based on the four principal items of investment, which are equipment, merchandise, work in progress, and accounts receivable.

A contractor should have in sight approximately two-thirds of the amount

of money he is going to use and will be able to go to his banker and jobber to get the other third. If he provides only 50% he is stringing his credit too far, and if his assets are less than 50% of his total investment he must look for difficulties. See to it that a certain amount of net assets or investment is provided and the business is not developed beyond what its investment would justify.

The Electrical Contractor-Dealer

BY GILBERT S. SMITH

Address Delivered at Pennsylvania State Convention in Philadelphia by
Mr. Smith of J. F. Buchanan & Co., Electrical Merchants of that City

I am expected to address my remarks to dealers—the would be dealers. I shall base what I have to say upon ten years of practical experience along this line. The theme for the setting might be: "Don't kid yourself into believing that you are something that you are not." Business is divided into three classes—manufacturing, engineering and merchandising.

Of the first, I know nothing. Of the other two, considerable. It is a very easy step into contracting, it is a very difficult step into merchandising. The contractor has qualified himself as a contractor; before he enters that business he has done engineering work—even though he be a wireman, he is an engineer. The wireman feels that he can get a contract perhaps from a friend and he concludes that he will enter the business as a contractor; he has not given it much thought, but he is qualified as a contractor because he was a wireman. Usually he has very little or no capital.

Now in entering the contracting business—it has been done with ease. In entering the merchandising business, it is entirely different. One must have capital and a great deal of it. One has knowledge or experience as a contractor. He has not gathered that knowledge as a merchant. Oh yes, he has a little business ability; he convinced the men they should give him the contract, but that is a long ways from merchandising. I believe there are more failures than successes in electrical merchandising. I believe that a great many people have undertaken electrical merchandising because some one suggested that it would be a good thing for them to do it without giving it the care and

attention necessary—without the education or the assistance that would make it a success, and without the finances entirely necessary. Probably the future will show us real electrical merchants by reason of the experience in the past.

Considering the various features that go to make an electrical merchandising business a success, let us enumerate a few. They are fundamental and of course you have heard them before.

1st. *The location.* I believe that the man who proposes to enter the merchandising business should select a location where the rent is just as high as he can possibly figure to pay and then perhaps a little more. He must be in the purchasing thoroughfare or very near it on an off street leading from the thoroughfare and not far from the corner. If he can get a long lease for that property and he locates rights, then before the lease expires he will be getting rent considerably less than property is worth. He cannot expect business in the warehouse district. That seems simple but a great many have located there just the same.

2nd. *The appearance of the store.* This is a hackneyed subject but it must be considered. That store must correspond with other individual stores in its cleanliness, in its dress, in its arrangement.

3rd. *The window.* We heard a great deal of windows in the last few days. We have had demonstrations. A gentleman on the floor yesterday said a great deal about it but if that location is placed where your window is of value, then that window will have to be used for all it is worth.

4th. *The matter of stock.* The question was raised yesterday as to how

many lines a man should carry. I have a very clean cut conception of the stock business and perhaps I can answer that questioner of yesterday to his satisfaction today. My conviction is that the dealer, the merchandiser, the retailer, should specialize to the extreme. Assuming that he was a contractor, a practical one from the ranks of wiremen, he is qualified to pass upon the best. He does not require anyone's judgment but his own and after he has selected a particular appliance that he is considering, he should tie up fast and consult with the distributor. He should operate as closely as possible with that house supplying him with that particular appliance and plug that one appliance—not two; one carries down the line from the large units to the smaller ones. There may be an occasional exception where another device diverges in design very greatly from the first selection, but where the two devices are similar, just one, and if he does a job with the one, he is doing well.

5th. *Finance.* That can be subdivided. I think anyone must be a first class nut who concludes he can conduct a business without sufficient capital, and for him to determine on how much capital is necessary, he will have to take someone into his confidence for advice. In the past, the contractor, now known as the contractor-dealer, has not valued his credit standing; he was conducting his business with the little money he had available and he neglected that very important feature of maintaining credit. We know there is only one way to hold your credit and that is to pay your bills, to maintain your promises, discount them if you will.

Another division of finance is that of

the installment or lease plan. We heard much as to the necessity of selling upon the lease plan that the volume of business cannot be obtained unless the instalment is introduced. One practical man told you yesterday that he had cut it out; he was running a strictly cash business or credit to those who are worthy of credit. We will admit that you can do more business upon cash credit and instalment, but if the dealer has decided that instalment is quite essential, I am convinced that he can get all of the financial help he requires in the conduct of that business on the instalment plan by going to his own local bank—the bank that is established in his town. It is the one to serve him and will serve him if he lays his cards upon the table, is a dealer of integrity and a man worthy of credit. I believe the bank in the town wherever he be located in the state, if properly approached, will loan him the money for his instalment business at virtually the same rate the bank would loan any other merchant.

I think it is only necessary to explain to the president of the particular bank where the dealer is known that he purposed to turn over to the bank the moneys that he receives upon the lease payment as the payments are made during a period of ten or twelve months, being the life of a lease contract. If this dealer presents to the banker his form of lease, written and prepared by an attorney, to cover the laws of the state, that the bank will advance him the money to pay for the machines he puts out on the installment plan. The banker will receive the moneys that the dealer receives as he gets them and satisfy the banker in every sense.

I had a dream a few years ago of a great volume of business being conducted by contractor-dealers in the city of Philadelphia, the city virtually zoned up into communities, business centers, and everyone of those business centers having a good contractor-dealer running a business there. I still believe that that is possible for the city of Philadelphia, and it would seem to me as though we have gone a long way toward reaching that condition.

6th. *Advertising.* I voice what has been said and believe that contractor-dealers must advertise. I believe that we are supported by the papers of our communities wherever we are and I am convinced that if the contractor-dealer visits the editor in his town, that editor

will sit down with him and will map out a plan that will suit the contractor-dealer for such publicity as he chooses to put over. How many of you yesterday saw the advertisement in the morning paper, a quarter page placed for the dealers of Philadelphia and without a cent of cost to them?

Here is free publicity, explaining what electricity does and why it does it and why people should have it. It seems to me as though we should support the papers that are helping us. Of course, they are advertising it for

their own selfish purposes, but if they are helping us while they are helping themselves, we ought to belong in the game.

I am convinced that electrical merchandising is a real man's job and unless one is going to enter it with a sincere determination, going to enter it with sufficient intelligence to make of it a success, and going to enter it with sufficient capital that it must have, he had better stop kidding himself into believing that he is something which he is not.

What Do You Know about ELECTRICITY?

Not in a scientific or mechanical way, but in its practical application to household purposes.

Are you familiar with the newest electrical devices and the latest improvements on the older devices—the hundred-and-one things that go to make the home more comfortable and attractive and house-keeping less laborious and more efficient? Progress in the field of electrical appliances is amazingly rapid; many of the cleverest brains and hands in the world are busy in finding more uses and more practical usefulness for this marvelous power. Electricity is fast becoming the Servant of all Work, an ever-ready, ever-willing servant, clean, capable, industrious and economical.

**Look for the
‘ELECTRICAL PAGE’
*Every Thursday in
THE NORTH AMERICAN***

It gives you the clearest, most complete information about every kind of electrical device and appliance, the application of them to home use, as found through actual experience and the almost daily developments and discoveries in this fascinating field of enterprise.

There is a Question and Answer Column, too, where you can submit your personal problems and get full details as to how you can obtain the best and the most service from the electrical helps you have or plan to have.

Keep pace with electrical progress. It means more comfort and less work and it is a subject worth knowing. You will find these Electrical Pages interesting to read and valuable for references. Remember they appear every Thursday in

THE NORTH AMERICAN

How to Operate Standard Accounting System

New Pamphlet Issued by Headquarters of N. A. E. C. D., Gives Detailed Explanation of Forms and Includes Handling Notes, Trade Acceptances, and Work in Progress

A supplement to the regular instructions for the Standard Accounting System has just been issued in pamphlet form and will be sent to those interested upon application to National Headquarters.

The following pages taken from the new pamphlet show trial balances for opening, operating and closing books, and certain transactions are carried through the various forms, all of which will clear up any questions that might arise in connection with the System. It also shows how to handle notes and trade acceptances and an account for work in progress, none of which are shown in the original instructions:

The following transactions illustrate the mode of procedure to bring all the forms of this system into operation.

It is assumed that the instructions as to the closing of the previous set of books and the preparation of a Trial Balance have been carried out.

The first step thereafter is to open the list of accounts as specified in the "Summary of operations" and the Trial Balance sheet of this system in the new General Ledger.

These instructions are given in Section I, page 3 of the "Circular of Instructions" which accompanies each set.

For the purpose of illustration a few simple transactions are carried through in order to complete a chain, so that

a second trial balance may be taken as a test.

No form of Charge or Cash Sales Ticket is shown nor is any form of bill recommended, but it is essential that the bills be in duplicate.

Trial Balance—Opening of Books			JANUARY
	Dr.	Cr.	
ASSETS			
FIXED INVESTMENTS			
Real Estate.....	Dr.	\$10,000.00	
Furniture and Office Appliances.....	Dr.	2,500.00	
Automobiles	Dr.	1,750.00	
Tools	Dr.	500.00	
Investments	Dr.		
CURRENT ASSETS			
Merchandise	Dr.	12,750.00	
Labor in Progress.....	Dr.	1,750.00	
Notes Receivable.....	Dr.	1,100.00	
Accounts Receivable.....	Dr.	8,500.00	
Trade Acceptances Receivable.....	Dr.	350.00	
Cash	Dr.	6,350.00	
Petty Cash.....	Dr.	75.00	
Money in Escrow.....	Dr.	1,200.00	
Cash Advances.....	Dr.	500.00	
DEFERRED ASSETS			
Insurance Premium Advances.....	Dr.	330.00	
Taxes Paid in Advance.....	Dr.	135.00	
Deferred Charges to Income.....	Dr.	500.00	
LIABILITIES			
CURRENT LIABILITIES			
Capital Stock.....	Cr.		\$25,000.00
Notes Payable	Cr.		5,300.00
Acceptances Payable	Cr.		1,550.00
Taxes Accrued (Income, etc.).....	Cr.		1,200.00
WORKING RESERVES			
Reserve for Doubtful Notes and Accounts Receivable..Cr.			200.00
Reserve for Depreciation Furniture and Appliances..Cr.			500.00
Reserve for Depreciation Automobiles.....Cr.			550.00
Reserve for Depreciation Tools.....Cr.			100.00
Reserve for Depreciation Merchandise.....Cr.			400.00
Reserve for Real Estate and Buildings.....Cr.			600.00
Surplus Account.....Cr.			12,890.00
			\$48,290.00
			\$48,290.00

Trace the following transactions on the illustrations as shown on pages 6 and 7:

Jan'y 2.—S. Jones Paid \$1,000.00 on his open account, having a balance of \$560.00 owing by him.

Jan'y 2.—Alex Brown placed his order

July 2 E. Brown placed his order for work to be executed according to a specification he had submitted, and received an estimated price of \$250.00 on same. Contract signed on this basis.

Jan'y 2.—F. Alexander paid his open account of \$250.00.
Jan'y 2.—P. Smith & Co. paid us com

missions due on a past completed transaction \$50.00.

Jan'y 2.—Paid Star Electric Supply Co.
bill amounting to \$3,500, less
\$70.00 discount, as per
voucher No. 501.

ELECTRICAL CONTRACTOR DEALER

Jan'y 3.—Store, Cash Sales, Supplies and Appliances, \$300.00.
 Jan'y 4.—Store, Cash Sales, Supplies and Appliances, \$400.00.
 Jan'y 5.—Store, Cash Sales, Supplies and Appliances, \$550.00.
 Jan'y 5.—Lamp Dept. Cash Sales, 2nd to 5th, \$260.00.
 Jan'y 6.—W. H. Morton paid his open account, \$1,000.00.
 Jan'y 6.—Store, Cash Sales, Supplies and Appliances, \$425.00.
 Jan'y 6.—Vouchers 502 to 507 for the following items paid this date: Pay Roll Acct., \$675.00; Salary Acct., \$250.00; Commission Acct., \$200.00; Freight, Express & Cartage, \$12.50; Stationery & Office Supplies, \$40.00; Direct Job Expense, \$75.00.
 Jan'y 8.—Alex Black paid on open account, \$650.00.

REQUISITION FOR MATERIAL

NO. <u>200A</u>	CHARGE TO JOB NO. <u>235</u>	FROM STOCK <u>Ye</u>	DATE <u>Jan'y 2-20</u>
ROUGHING <input checked="" type="checkbox"/>	FINISHING <input checked="" type="checkbox"/>	FROM VENDOR <u>TOOLBOX, CUTTER, STOCK & CO.</u>	
NAME <u>Alex Brown</u>		ADDRESS <u>70 East 56th St City</u>	
QUANTITY	DATE DELIVERED	MATERIAL	COST
<u>40'</u>	<u>2-1-20</u>	<u>3" Black Conduit</u>	<u>.260</u>
<u>100'</u>	<u>"</u>	<u>4.0' Cable</u>	<u>.2700</u>
<u>2</u>	<u>"</u>	<u>3" Elbows</u>	<u>.61</u>
<u>2</u>	<u>"</u>	<u>3" Lockwash & Bushings</u>	<u>.140</u>
<u>3</u>	<u>"</u>	<u>3" Knudz Bushings</u>	<u>.144</u>
<u>6</u>	<u>"</u>	<u>3" Pipe Straps</u>	<u>.16</u>
<u>14</u>	<u>"</u>	<u>10" 1/4" Bolts & Nuts</u>	<u>.32</u>
<u>1</u>	<u>"</u>	<u>3" P.B. Conduit</u>	<u>.50</u>
		<u>Jape¹² Mule¹² Solder¹²</u>	<u>.50</u>
REMARKS <u>Deliver by truck tomorrow morning not later than 9 A.M. to house on Job Tools.</u>		TOTAL <u>70.20</u>	NEED BY <u>Mo. 1st</u>

Jan'y 10.—Store, Cash Sales, Supplies and appliances, 8th and 9th, \$775.00.
 Jan'y 10.—Jas. Brown paid his open account of \$750.00 less a cash discount of \$25.00.
 Jan'y 10.—Vouchers 508 to 519 for the following items were paid this date: Rent Acct., \$300.00; Light, Heat & Power, \$60.00; Personal Property Taxes, \$1,200.00; Automobile Expense, \$70.00; Postage Acct., \$10.00; Telegraph & Telephone, \$22.50; Warehouse Expenses, \$22.00; Miscellaneous Expense, \$75.00; Advertising Expense, \$225.00; Travel and Ent., \$40.00; Metal Fixtures Co., \$275.50; Standard Motor Co. \$1,000.00.
 Jan'y 12.—Vouchers 520 to 522 for the following items were paid this date: Labor Acct., Pay Roll, \$750.00; salaries, \$250.00; Commission Acct., \$650.00.
 Jan'y 14.—Store, Cash Sales, Supplies and Appliances, 10th, 11th & 12th, \$1,640.00.
 Jan'y 15.—Lamp Dept. Cash Sales to date, \$575.00. A. S. Dutton Co. paid on acct., \$1,500.00. Billed S. Jones on Job, \$205, see bill details. On Sales Recapitulation Sheet for Material, Labor and Direct Job Expense as per bill number 1,195, total \$3,100.00. Billed Alex Brown Job, \$235, see bill No. 1,200. Sales Recapitulation Sheet total, \$250.00.

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RETURNED MATERIAL RECORD
 NO. 164 DATE 1-1-20
 CREDIT TO JOB NO. 235
 ROUGHING FINISHING
 NAME Alex Brown TOOLS See Below
 ADDRESS 70 East 56th St

QUANTITY	MATERIAL	COST
<u>20'</u>	<u>3" Black Conduit</u>	<u>.1940</u>
<u>25'</u>	<u>4.0' Cable</u>	<u>.670</u>
<u>3</u>	<u>3" Pipe Straps</u>	<u>.008</u>
<u>x Pipe Vice Cutter</u>		
<u>Stock Dies</u>		
<u>2 Step Ladders</u>		
REMARKS <u>Tools & Tools returned by customer \$70.00 1/1/20</u>		
		<u>2023</u>

A sample Time Ticket, Material Requisition, Returned Material Record, Job Envelope and Material Summary Sheet are shown in detail on this Job.

A compilation of all bills rendered for Lamps charged to customers is made from the duplicate bills of the Lamp Department and the totals entered on the Sales Recapitulation Sheet.

A similar compilation of Store Sales billed and Fixture Department Sales billed is obtained from the duplicate bills of such customers and entered on the Sales Recapitulation Sheet, after which by following the instructions as given in Section four, pages 8 and 9, of circular of instructions sent with set, "Closing Books for the Month" "The Summary of Operations" figures and the following trial balance is obtained:

Trial Balance—Summary of Operations

	JANUARY
	Dr. Cr.
NAMES	
Sales Billed	Cr. \$18,950.00
Cash Discount Allowed	Dr. \$ 25.00
Commissions Allowed	Dr. 850.00
Cost of Sales Billed	Dr. 14,462.55
Freight, Express, Carting (unabsorbed)	Dr. 12.50
SUNDRY EARNINGS	
Commissions Received	Cr. 50.00
Cash Discount Earned	Cr. 70.00
GENERAL EXPENSES	
Salaries	Dr. 500.00
Rent	Dr. 300.00
Light, Heat, Power	Dr. 60.00
Stationery and Office Supplies	Dr. 40.00
Traveling and Entertaining	Dr. 40.00
Telegraph and Telephone	Dr. 22.50
Postage	Dr. 10.00
Advertising	Dr. 225.00
Taxes	Dr. 1,200.00
Insurance	Dr. 22.00
Association Expenses	Dr. 70.00
Warehouse Upkeep	Dr. 75.00
Interest	Dr. 1,115.45
Automobiles	Dr. 1,115.45
Other General Expenses	Dr. 1,115.45
CONTINGENCY RESERVES AND DEPRECIATIONS	
Allowance for Loss on Notes and Acc'ts Receivable	Dr. 1,115.45
Allowances for Depreciation on Furniture & Appl'ncs	Dr. 1,115.45
Allowance for Depreciation Automobiles	Dr. 1,115.45
Allowances for Depreciation Tools	Dr. 1,115.45
Allowances for Depreciation Merchandise	Dr. 1,115.45
Surplus	Dr. 1,115.45
	\$19,070.00
	\$19,070.00

Trial Balance—Closing of Book:

ASSETS	Dr.	JANUARY Cr.
FIXED INVESTMENTS		
Real Estate.....	Dr. \$10,000.00	
Furniture and Office Appliances.....	Dr. 2,500.00	
Automobiles	Dr. 1,750.00	
Tools	Dr. 500.00	
Investments	Dr.	
CURRENT ASSETS		
Merchandise	Dr. 5,058.95	
Labor in Progress.....	Dr. 1,254.00	
Notes Receivable.....	Dr. 1,100.00	
Accounts Receivable.....	Dr. 17,125.00	
Trade Acceptances Receivable.....	Dr. 350.00	
Cash	Dr. 7,067.50	
Petty Cash.....	Dr. 75.00	
Money in Escrow.....	Dr. 1,200.00	
Cash Advances.....	Dr. 500.00	
DEFERRED ASSETS		
Insurance Premium Advances.....	Dr. 330.00	
Taxes Paid in Advance.....	Dr. 135.00	
Deferred Charges to Income.....	Dr. 50.00	
LIABILITIES		
Capital Stock.....	Cr. \$25,000.00	
CURRENT LIABILITIES		
Notes { Payable	Cr. 5,300.00	
Acceptances }	Cr. 1,550.00	
Accounts Payable.....	Cr. 1,200.00	
Taxes Accrued (Income, etc.).....	Cr.	
WORKING RESERVES		
Reserve for Doubtful Notes and Accounts Receivable.. Cr.		200.00
Reserve for Depreciation Furniture and Appliances.. Cr.		500.00
Reserve for Depreciation Automobiles..... Cr.		550.00
Reserve for Depreciation Tools..... Cr.		100.00
Reserve for Depreciation Merchandise..... Cr.		400.00
Reserve for Real Estate and Buildings..... Cr.		600.00
Surplus Account..... Cr.		14,045.45
	\$49,445.45	\$49,445.45

MATERIAL SUMMARY SHEET									
JOB NO. 235		NAME <u>Glen Brown</u>		ADDRESS <u>70 East 56th St</u>					
ITEM	AMT.	ITEM	AMT.	ITEM	AMT.	ITEM	AMT.	ITEM	AMT.
5/4		Receptacle 20 A							
400' 40' 20' 20'	20' 20'	3' Black Cordend	6'	1300					
100' 100' 25' 75'	25' 75'	4' O Cable	27'	2000					
4 2	2	5' B Cables	66						
3 2	2	3' Lead Nails & Staples	144						
3 3	3	3' Heavy Bushings	160						
6 6	3	3' Pipe Straps	96						
4 4	4	10' Ho Body Nails	48						
1 1	1	3' - 88' Condulets	500						
		2 Roll Tape	50						
		Nails	50						
		Collar	50						
<i>Contract Job See Estimate #442</i>									
<i>Credits on Return Material Rec'd 7/10</i>									

HANDLING NOTES AND TRADE ACCEPTANCES PAYABLE

Where debt has been created in favor of the vendor through Voucher Disbursement sheet and the contractor-dealer wishes to settle such indebtedness by note or trade acceptance.

In order that the principle of disbursing all entries through the Voucher Disbursement sheet may be maintained, the following procedure will give the proper results and at all times show the true nature of the liability:

Use the journal and through debit

entry to vendor's account in "accounts payable" column, discharge obligation to the vendor in the "Accounts payable" ledger, making a corresponding credit entry in the name of the vendor to account termed "Notes and trade acceptances payable" in the general ledger.

When notes or trade acceptances become due and payable, the foregoing entries should be reversed, thereby creating a new liability in the accounts payable ledger in favor of vendor and charging the amount involved (in vendor's name) to account "Notes and trade acceptances payable" in general ledger so that this will be balanced.

Cash payment for "Notes and trade acceptances payable" due vendor entered to "Accounts payable" in "Cash paid" sheet then liquidates the outstanding account in vendor's name in "Accounts payable" ledger.

By handling notes and trade acceptances payable in this manner the contractor-dealer's balance sheet will always show true amount of this open accounts payable and the amount he owes in the form of notes and trade acceptances.

Examples

1—Contractor-Dealer (A) secures from vendor (B) \$4,000 worth of merchandise.

2—A makes a settlement of invoice by cash payment of \$2,000 and a trade acceptance for \$2,000.

3—The following entries should be made as the transaction is complete:

4—Credit B in "accounts payable" column voucher disbursement book with \$4,000. Debit "merchandise account" column voucher disbursement book with \$4,000.

5—Draw check for \$2,000 charging to B's account in "accounts payable" column on "cash paid" sheet, making entry in the "bank" column for \$2,000 on the "cash paid" sheet.

6—To take care of the balance of the indebtedness, \$2,000 which A wishes to settle with trade acceptance:

7—Debit B's account in the "accounts payable" column in the journal and credit in the name of B "notes and acceptances payable" account in the general ledger column provided in the journal.

8—When trade acceptance falls due (the same applies in case of a note) A draws a check for \$2,000 to meet the obligation, but having no column on the "cash paid" sheet through which he can charge notes or acceptances payable in the general ledger to relieve liability previously created in the name of B through the journal entry, he proceeds as follows:

SALES RECAPITULATION SHEET

FOR MONTH OF January 1920

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CUSTOMERS BILL NO.		CONSTRUCTION SALES					LAND SALES		STONE SALES		SALES	
	JOB NO.	WORKS CRAFT	DIRECT LAB EXPENSE	COST OF MATERIALS	SALES AMOUNT		COST OF LAND ACRES	LAND SALES AMOUNT	COST OF STONE BLOCKS	STONE SALES AMOUNT		SALES
1195	205	Bricklaying	70000	100000	170000	Afghan	200000	400000				
1200	206	Brick	50000	100000	150000	100000	150000	300000				
<i>Lake Charles</i>												
<i>Billed 4/15</i>							400000		500000			
<i>St. Louis</i>												
<i>Billed 4/15</i>									500000		500000	
<i>Port Huron</i>												
<i>Billed 4/15</i>												
<i>Maryport, N.Y.</i>												
<i>Billed 4/15</i>												
TOTAL		700000	100000	70000	2776000	1800000	100000	1000000	200000	300000	115000	300000

9—Through a journal entry A credits B's account in the "accounts payable" ledger, \$2,000 and indebtedness in B's name "notes and acceptances payable" in the general ledger, \$2,000.

10—These entries clear the liability in the general ledger under "notes and acceptances payable" in favor of B, and there now appears in the "accounts payable" ledger on B's account a credit in the favor for \$2,000 which will offset by charging on "cash paid" sheet to B in "accounts payable" column this \$2,000 with a corresponding entry in the "bank balance" column.

11—Through the foregoing entries the books reflect the changed nature of the obligation from an open account to a note or trade acceptance, but when said note or trade acceptance becomes payable it is necessary to reverse the former entries from "accounts payable" to "notes and acceptances payable" in the general ledger in order that a direct entry can be made on the "cash paid" sheet to a definite account in the "accounts payable" ledger.

WORK IN PROGRESS

In regard to the question of partial payments on contracts spread over a considerable period of time, there always has been a wide divergence of opinion as to whether or not a contractor, receiving partial payments for labor and material furnished on an uncompleted contract, should simply credit accounts receivable with the amount of partial payment received and not show any profit on the contract until the work is finally completed and exact record obtained of the cost of the contract.

Among larger contracting concerns

CASH RECEIVED

EAST PAIE

VOLUME ACTIVITY BY CASH CLASSIFICATION AND REVENUE TYPE		CASH POSITION							
ACCOUNT NUMBER	CHECK NUMBER	DATE	NAME	PERIOD	ACCOUNTS RECEIVABLE	DISCOUNTS DEDUCTED	BALANCE	BALANCE	BALANCE
501	7002	Aug 2	Star Bistro Inc	1	\$5,000.00	700.00	\$4,300.00	400.00	
	7001	- 6	Cafe Au Petit Ch	101	67,000.00		67,000.00		
	3	-	Chay Au Offic	102	50,000.00		50,000.00		
	4	-	Chay Au Offic	103	20,000.00		20,000.00		
	5	-	Brasserie Star	107	10,000.00		10,000.00		
	6	-	Galerie & Office Supplies	108	40,000.00		40,000.00		
	7	-	Grand Tea Emporium	110	70,000.00		70,000.00	400.00	
	8	7	Highlife Inc. January	112	30,000.00		30,000.00		
	9	8	Highlife Heat Power	114	60,000.00		60,000.00		
510	9	- A	Larce Brothers	116	100,000.00		100,000.00		
	11	7000	Loganville Supp	118	70,000.00		70,000.00		
	12	1	Malgro Opt	120	10,000.00		10,000.00		
	13	2	T. L. Opt & Telephone	122	20,000.00		20,000.00		
	14	3	Wardrobe Optique	124	20,000.00		20,000.00		
	15	4	Westalliance Optique	126	20,000.00		20,000.00		
	16	5	Westerhouse Optique	128	20,000.00		20,000.00		
	17	6	Wood & Woodland	130	40,000.00		40,000.00		
	18	7	Wynell Optique Inc	132	20,000.00		20,000.00		
	19	8	Standard Doctor Co	134	100,000.00		100,000.00	100.00	
520	9	- 10	Salon Au Ray Hall	136	70,000.00		70,000.00		
	21	770	Sophia Offic	138	30,000.00		30,000.00		
	22	1	Spacious Interiors Opt	140	40,000.00		40,000.00	200.00	
			Transfer to Cash Acc. First Direct			700.00			
			St. Amantte Optique Inc	142	90,000.00		90,000.00		
			St. Louis Diamond Optique	144	20,000.00		20,000.00		
			To Cash Acc. First Direct			200.00			
				TOTAL	1000000.00	100000.00	800000.00	1000.00	

where they have a fairly substantial percentage of work extending over one month it is easy for them to show a loss in operation for several months until the entire contract is completed and then have the profit reflected on this work.

If the partial payments received cover but a small portion of the total billing, it is recommended that these be simply credited to the particular account in "Accounts receivable" book with whatever sums are received in the nature of partial payments, showing profits only at the completion of the contracts.

VOUCHER DISBURSEMENT SHEET

However, if the proportion of partial payments received on this class of work is a considerable factor in the total billing, each month he should arrange to have such partial payments carry a percentage equal to his overhead expense: e. g.

A contractor, according to his job envelope, expended during, say, March on one of his contracts

Material expense...\$1,000.00
Labor 500.00 1,500.00

and obtains a payment thereon of \$1,200.00 against the amount of his unbilled costs on this contract.

In order to have his overhead expense relieved by showing some profit on this partial payment of \$1,200.00 he should proceed as follows:

Make a bill to the customer for the amount of the partial payment, \$1,200.00, which automatically becomes a charge against the customer's account in the "accounts receivable" ledger, and the amount of \$1,200.00 should be entered in the sales recapitulation book under the name of the customer to "construction sales billed." The contractor's overhead (for purpose of example) is, let us say, 15% of his sales.

Of the actual cost to date (\$1,500) two-thirds of the amount represents material, one-third of the amount represents labor.

Bill rendered to the customer to date

ACCOUNTS PAYABLE

NAME Star Electrical Supply Co.
ADDRESS 56 Fifth St. bldg

ACCOUNTS RECEIVABLE

NAME S. Jones
ADDRESS 76 Fifth Ave., Brooklyn

This subject is not covered in the Book of Instruction as it is one of those involved transactions which might cause the average contractor-dealer to think the system too complicated.

In the last analysis it is felt that the contractor-dealer should simply credit accounts receivable with whatever partial payments are received on uncompleted work, showing no profit until the job is finally completed, unless this type of contract is a large factor in his business.

Are Present Margins on Appliances Profitable?

By L. E. TROTTER

Assistant Sales Manager of Post-Glover Electric Co., Cincinnati, Answers Negatively in Paper Read at Ohio State Association Meeting

The object of this paper is to try to briefly give you a few facts on the question of "Are the Present Margins on Appliances Profitable?" The general answer to this question is "No," and this answer is based on the usual gross profit to dealers of 25%.

It is true that there are several conditions which have a direct bearing on the amount of profit that a dealer must secure to allow him a reasonable net margin, and inasmuch as you are quite familiar with most of these conditions we are going to just touch lightly on this phase of the question.

The item of overhead has probably the greatest direct bearing on the amount of profit necessary to allow a dealer to do a profitable business on a set margin. Another very important point is the amount of turnover which can be made on a certain appliance. It is obvious that if the turnover is sufficient and the overhead small a commodity can be handled on a much smaller margin, but statistics show us that an average condition among the dealers who sell and service larger appliances should have a discount of from 30 to 35% and it is only under the most favorable conditions that he can make a satisfactory showing at this gross margin of profit.

As a specific and extremely unusual case we have in mind a retail store which did a total business on large motor appliances amounting to approximately \$87,000, with a gross profit of approximately \$32,000, or 37%. The operating expense of this retail store aggregated for this same period of time approximately \$29,000, which you will note again is 33-1/3% of the total sales billed, or in other words this leaves a net profit of \$3,000, or approximately 3.4%.

As stated, this is an unusual condition, but we are citing it to you merely to substantiate the statement made above that from 30 to 35% seems to us to be the minimum amount of margin on which a good live advertising dealer should be operating.

We have in mind also a dealer who is doing a monthly business between \$5,500 and \$6,000, and is not making any money on discounts of 25% on

washing machines and ironers and 33% on vacuum cleaners. This dealer's store is in an excellent location on the main street of a city having approximately 70,000 inhabitants. A good portion of his sales are made in the store. No commission is paid on store sales. The solicitors who make a house to house canvass are paid at the rate of 10% on washing and ironing machine sales and 20% on vacuum cleaner sales. Although a 20% commission is paid on vacuum cleaner sales as compared to 10% on washers and ironers it is believed that this is possible in view of the fact that there are seldom any delivery charges on cleaners, whereas the delivery charges on washers and ironers amount to a considerable sum.

Changed Conditions Now

What we are particularly interested in right now is. How are the dealers going to handle appliances in the period facing us which we all believe is not going to be as easy sailing as we have had for the past two or three years? Dealers to be successful in merchandising the various commodities must beyond doubt maintain a selling force that will get the necessary results and it is true that a selling force cannot be maintained at a small expense. Salesmen are expensive and good salesmen naturally demand good salaries, and it is obvious that it is impossible for this condition to be met unless the dealer has a margin of profit that will justify this expenditure.

We are frank in telling you that we believe in the next year or two the dealer's or merchant's overhead is going to be higher on electrical appliances than it has in the last two years, and we therefore must say that we cannot possibly see a profitable margin for the dealer unless the present conditions are changed very materially. If the jobbers in their meeting with the manufacturers are able to put enough real pep into their arguments the electrical appliance game as handled by the electrical dealers may continue to flourish, but unless this condition is brought about it seems to us that there is nothing in this line of material for the dealers to look forward to.

It has been my personal experience to have recently had an opportunity to talk to merchants in our lines of material and one particular case which is recalled, is a man who is handling stoves. When the question of discount, namely 25%, was mentioned to him as a working margin, you can believe me when I tell you that it did not take him long to make up his mind that he was not interested in the electric range proposition. He was a merchant of long experience and knew whereof he spoke.

It seems to me that the sale of electrical appliances has grown into a very deep rut and unless this condition can be changed the results as outlined above are sure to be brought about. We do not believe that it is going to be possible to correct this condition overnight. On the other hand, it is only going to be through the untiring efforts of both the jobbers and dealers that a satisfactory working condition is going to be brought about and we would like to recommend in conclusion that every dealer in this country should work hard and earnestly to show to the jobbers and manufacturers actual results which will probably do more toward bringing about the desired relief than anything else.

Is it not possible for you as a dealer to send to your jobber your actual sales conditions? Show him the amount of appliance business you have done in the past year together with the total profit and actual expense of doing this business. Do you not believe that by such a procedure you will be helping the general cause? As stated at the beginning of this paper we believe that there is only one answer to the question under discussion "Are the Present Margins of Profit on Appliances Profitable?" and the answer is "No."

Another Example

Another working condition which happened to come to my attention was that of a dealer who employed a specialty salesman who is devoting his entire time to the sale of washing machines and ironers. An a study of this man for two weeks we found the following results:

In the two weeks' period he sold four

washing machines and two ironers at a total sales price of \$1085. His salary and expenses figured \$25 per week plus a commission of 5% amounting to \$104.75. This you will note made an actual selling expense to the dealer of 10% and I believe that you will all agree that this salesman in the two weeks was successful.

The dealer handling this material is buying at a discount of 25% delivered

to his store. This leaves a gross margin of 15% out of which he must stand the delivery of the machine to the user, the handling of the account, advertising, and whatever service is demanded.

It is true that we have gone through boom times in washing and ironing machines and vacuum cleaners and other appliances when they almost sold themselves, and with what result? Thousands of these appliances have

been sold but hundreds of dealers have been made lukewarm toward the appliance business and for only one reason. Their margin of profit has not been and is not yet sufficient to take care of their normal overhead and leave them a net profit, without mentioning at all the allowance that must be made in making free repairs in the name of service, which must be given by the electrical business.

The History and Work of the National Association

By W. H. MORTON

On February 3rd the Secretary-Treasurer of the N. A. E. C. D. Addressed the Toronto District, Canadian Division, on the Functioning of the Organization

The local or district organization we consider is the key to the national movement. The actual work must be done here by the membership. The national organization outlines the plans and directs the energies of the whole organization, but the local work must be done by the individual members of the district unit.

I am going to try to cover as briefly as possible the National Association work, and to do so I will have to use statistics to some extent.

The National movement started in New York City in 1887. As a result of those activities a state association was formed in 1889. Such benefit was experienced by this association that in 1901 we issued a call for a meeting in Buffalo to discuss the question of whether a national organization in our trade was an advantage. At that time contracting was hardly recognized as an industry and dealers were practically unknown.

We circularized the country as to the sentiment toward National organization, with the result that we called a meeting in July 1901 at which 48 contractors were present, and from the discussion at this meeting we decided it was necessary that a national organization be created. At that meeting in Buffalo in 1901, the keystone was laid by these 48 men. Thirty-six of them are still living and in the association. In fact we have lost none of the original founders of that association except those removed by death and other unavoidable causes.

The old organization has been criticised for lack of results, but it should be remembered in this connection that at that time coöperation was not known. We had to devote our time in educating

contractors to treat each other even decently. The following are a few of the accomplishments of the old organization:

First, we got representation on the Board of Underwriters in 1903. In 1906 we recognized for the first time that some of our members were retailers by changing the by-laws. In 1910 Canada was first represented by that association through W. B. Shaw. In 1911 we started coöperative work with the N. E. L. A. In 1912 we worked out a standard conduit size chart and universal estimate sheet. In 1913 the first system of bookkeeping was published. In 1914 we obtained liability insurance. In 1917 the entire association was reorganized. This was largely due to the work of W. L. Goodwin.

Too much cannot be said of what Mr. Goodwin has done for the entire electrical industry. He started them all thinking. The work of our committee has resulted in the present form of the National Association. That is a "home rule" organization at the present time. The association is divided up into divisions and each division into locals, such as I am addressing tonight.

At the same time we changed our dues, putting them on the basis of each member paying a percentage on the amount of business done. That has been criticised due to the fact that we changed from a flat rate, but I think it is the fair way of handling an organization of that kind. The larger the man's business the more he gets out of his organization, consequently the more he should give to the association. The dues are based on a rate of one-fortieth of one percent.

The work of the association is carried

on through an executive committee which has direction of all the activities. You cannot realize the amount of thought and actual work the executive committee is required to put forth. That work is all donated. I think sometimes the members lose sight of the amount of work done by the National Executive Committee and the standing committees. The work of the various committees is briefly as follows:

First, there is the Architectural and Engineering Committees which negotiate between the National Association and the engineering and architectural organizations. They are at present working on estimating engineering. It is a kind or class of educational work that could only be carried on in a national way. Then there is the Symbols Committee on which we have three members representing allied trades.

We have a Code Committee which works directly with the National Board of Fire Underwriters. That committee has as much to say in the formation of rules and changes in rules as the National Fire Protection Committee has in backing such rules. This Code Committee is almost of inestimable value in preventing rules from being passed that are not practical. There are many cases where rules are suggested by some branches of the industry that read all right, but looked at from an installation standpoint they are impractical. Then we have the Cost Data Committee, whose work is chiefly to get at the costs of electrical installations. That committee has been working for four years against tremendous handicaps because cost data of installations is not kept with uniformity by contractors.

Much has been said lately about

neglecting the contractor for merchandising. I don't think that is the true condition. It may appear so from our publications. That, I think, is because it is so much easier to get readable articles on merchandising, than on contracting. Naturally the merchandising of electrical goods is closely related to other types of merchandising. On the construction end, however, we cannot get the information. The men who, if you could get them to sit down, could tell you all about it, have not the time to do so.

We had a valuable report known as the Labor Data report presented in Cleveland in 1919, but that had no bearing on other cities. The work of this committee is to educate the contractor members of the organization so that they will keep their data in uniform shape where we can collect it, and build up statistics that will give you the data you want. It is a big piece of work. It is educational and must go slowly. You will be asked as time goes on to keep your data in accordance with suggestions of this committee, and while it may not agree with your ideas on the subject, I hope you will do it. We want to be able to call on the whole country for data of a uniform nature, and from that data give you the results you want. Mr. Abbott of St. Paul, Minn., is in charge of that work.

The Credit and Accounting Committee work is very closely related to that of the Cost Data Committee. They are doing very valuable work. We found from our experience of cost accounting that we had devised a system which was too big for many members, and we do not recommend it for business below \$10,000 a year. Our next step, therefore, was to bring out our New Business Record which was adopted at the Baltimore Convention. It is very simple. It is a single entry system that can be balanced. It gives you the fundamental information you want to have in your business. It is sold to members of the association at \$9.75, and \$12.50 to non-members. It is so arranged that you can easily transfer from it to the Standard Cost Accounting System when your business demands it.

That leads me to the important matter of the cost of overhead, in which is involved the question of whether there is a proper spread in price from the cost to you and the selling price to the consumer. Between your purchase

price and the price at which you are obliged to sell must be a margin sufficient to cover your overhead and give you a reasonable profit. We have got to show to the manufacturers and jobbers the actual conditions in our business—what it costs us to handle their goods. We must prove to them that we are not covering up inefficiencies and poor business methods. The only way we can do that is by getting this data from all sections of the country, which is very difficult.

A questionnaire goes out once a year on the cost of overhead. It has been

merchandising and contracting business.

We went a little further in our investigations along these lines. We investigated six concerns located in three different cities in the States, all doing a business of \$100,000 a year. We sent auditors to these concerns who went right through their books for an entire year and figured the businesses and took averages. The report of this effort was published in Bulletin 33. It did more to stir up the question of proper compensation to the dealer than any other document ever put out by the National Association. It clearly set before them that the cost of merchandising in the contracting-merchandising field was 30.75%.

The cost to us to investigate those six concerns was about \$85 a piece. The point I want to emphasize and impress on you is that this is the way we must do such work. Our figures of course were open to criticism on the grounds that they were biased because they were collected by our organization. To overcome that we are trying to get a joint investigation made by the Harvard Bureau of Business Research which devotes its time to investigating business conditions in retail trade. We have made a proposition to carry on a three years' investigation in our business and put the results out in bulletin form.

We had placed before us in Baltimore, by Mr. Goodwin, a startling chart dealing with the question of handling retail business. I cannot work it out mathematically for you here, but I know it works. Briefly his proposition was this: To find out the profit on your capital, take your gross profit less your overhead, divide by your merchandising account—the number of days your goods are carried in stock—plus your accounts receivable and multiply by 360—the number of working days in the year—and you will arrive at the answer.

For example, take a concern with a gross profit of 30 percent less overhead of 25 percent, divided by the merchandising account, say, 120 days, plus accounts receivable of say an average of 120 days old; that gives you a profit of 6.8 percent on the capital invested. Take the same concern and increase the efficiency, leaving the gross profit the same, the overhead the same, and bring the merchandising account down to a turnover of 30 days, accounts receivable averaging 30 days, and the profit will be 20 percent on



W. H. Morton

gone over very carefully, and every question asked is with a definite purpose in view. There is no question that cannot be answered very easily if you are handling your business properly. Our 1920 questionnaire has been out since the 19th of December, and the replies to date are almost nothing. There is no use of your Executive Committee attempting to carry out these plans unless the members get back of it. We cannot get out a set of cost and overhead figures that will stand examination unless we have the documents from you and all the other men in the country with which to do it. We must have those reports to prove our case and get the difference between purchase and selling prices in both the

capital invested. You have done nothing but increase the efficiency of the concern and thereby you largely increase the profits.

Now a word about the Data and Sales Book. I don't think the book is appreciated as it should be. That book, if properly used, is the most valuable asset the association has. It gives you under one cover most articles of ordinary use in your business, and it gives them in a form that you can use it as a cost book if you wish. At the back of the book we give you engineering data which includes the National Electrical Code reprinted exactly. It is my opinion that the contractor can take that book with him on a hurry call and estimate a job right from that book. The trouble is it is not appreciated enough to be always used.

The merchandising end is taken care of by pink sheets in the front. That gives you, on the first two pages, a condensed list of articles you sell over the counter every day. In the appliance end it gives you a pretty complete comparative list of all the different appliances.

We have on three different occasions sent out bulletins explaining how the book can and should be used. It is one of the most expensive undertakings of the association. It cost us \$6,000 last year. I hope that members of this district will take our Bulletin 27 at an early date and go through the Data and Sales Book and see what they can do with it when they put it to use.

The work of the House Wiring Committee is of a very general character. That committee works principally with the National Electric Light Association in getting out plans for securing residence lighting. At present the committee is working on a plan for coöperative campaigns embracing central stations, jobbers and contractors. In the city where this work is being tried out the central station supplies cards to the contractor at 10 cents each. The central station puts up an equal amount. The territory is divided into districts, so that there is no duplication in effort. The contractor-dealer is only required to buy as many cards as he feels he can successfully handle in his business. If a card is returned to the lighting company unsigned or bearing a definite reason why the contract was not secured, a new card is given the contractor without any charge.

The Publication Committee operates the ELECTRICAL CONTRACTOR-DEALER—a much criticised and much thought of

monthly magazine. This publication produces one-half of the revenue of the association. We want you to send to it for publication articles of any sort that are of interest to the trade.

It has been claimed that the association should not publish a magazine in competition with other trade publications; but I would like to point out that when this paper was started there was no other trade journal in the field to do the pioneer work in this connection. I would not say but that it would be wrong for an association of this kind to start publishing a new paper now, when there are well organized and established trade journals in the field, but that is a different thing altogether.

The net profit on the ELECTRICAL CONTRACTOR-DEALER Magazine last year, after deducting all expenses and charges, was \$17,000. I want to point out too that those charges include a proportionate percentage of the entire overhead of the association. The profit, therefore, is after all those charges have been made.

Then we have the Standardization Committee. At present it is not very active. Its efforts have been somewhat checked by patent rights, etc. We are keeping at it, however, with hope of future success.

The Labor Committee represents a movement that has not, I think, been attempted by any other trade. We have a committee of five which meets with a committee of five of the I. B. E. W. Their first act was to adopt a set of principles. The National Labor Council was created by the Executive Committee to get those principles adopted by all the local unions on the basis of uniform agreements. They are forming a Board of Conciliation. That board will function in cases where the Labor Council cannot succeed in settling the question.

Then we have the Trade Policy Committee, which forms a sort of clearing house for the association. It is composed of the chairman of the manufacturers' committee, the jobbers' committee, the central stations' committee, and the merchandising committee. It deals with the broad policies of the trade.

The Membership Committee acts entirely on the question of getting members. On January 1st we had over 2,200 members in the National Association. That represents 47 States in the United States, two divisions in Canada, and one in Mexico. When you consider

that those members represent over a hundred million dollars' worth of gross business and over fifty-four million dollars' worth of supplies bought, it is a pretty representative organization.

We need more members, and we want more members in Canada. Every member adds weight to the association. The work involved in handling this membership is very large. We handle something over 434 forms for the association not including the Data and Sales Book. Last year we took in a little over \$25,000 in dues from members. That means an average of \$12.96 per member. I may say here that the average dues per member collected in Canada is \$15.76, so Canada is above the average in the amount of individual dues.

The expenditures for the year were over \$62,000, or \$31.08 per member. This may look like a losing proposition, but the difference is made up from the proceeds of the ELECTRICAL CONTRACTOR-DEALER and the sale of forms to non-members of the association, on which we make a profit. We make no profit, however, on forms sold to members of the association.

I would like to say a word about the annual convention. If we could get every member to attend the annual conventions we would have much more efficient work in the organization. I hope Canada will turn out one hundred percent representation at the Anniversary Convention to be held in Buffalo on the 20th, 21st and 22nd of next July. We expect to have a residence lighting exhibit on in Buffalo at that time which will exceed anything of the kind ever done. Two and a half days will be taken up with convention matters, and half a day in an outing to Niagara Falls, and going through one of the power houses there.

As already pointed out, the work of the National Association is and must be largely educational, but broadly speaking we have improved the feeling in the trade between the manufacturer, the supply jobber and the dealer. We have made it easier for you to be efficient and to get more profit, and that is where you must derive your big benefits from the National Association.

To quote the late Colonel Roosevelt: "Every man owes to his industry some of his time and effort if he is getting his living from that industry." We need the personal interest and suggestions—the time and effort—of every member connected with the organization to make it a complete success.

Buffalo Boosted

Convention City Receives Just Praise from Pacific Ports

The city in which the big anniversary convention of the National Association of Electrical Contractors and Dealers is to be held next July points with pride to an article published in Pacific Ports, a magazine of international circulation, issued at Seattle, Wash. It cites Buffalo as one of the nerve centers of industry, and sets forth the various products of that city which will interest the overseas visitor.

According to the article, which was written by R. A. Alberts, at least half of all the many kinds of different goods manufactured in the United States are included in Buffalo industries. The article proceeds in part as follows:

"Until the beginning of the present century, Buffalo's growth as a manufacturing center was limited and the commerce of this city was its chief asset. Buffalo is located at the western end of New York state and is the eastern terminus of deep water transportation on the Great Lakes. Following the development of the Western States and of the Canadian Northwest, Buffalo's harbor became the funnel through which poured the golden grain crops of a continent in hundreds of millions of bushels, to be distributed from this point to consumers in various parts of the world.

"More than two hundred Buffalo firms manufacture for export. Many of the lines they produce have been standard equipment in foreign countries for a long period of years. More recent developments in this line include drying and chemical apparatus which are now extensively manufactured in this city.

"Buffalo has profited greatly and has a perpetual asset in the harnessing of the mighty current of Niagara River, which has its source in the Great Lakes, beginning at Buffalo. Twenty miles away, at Niagara Falls, in their fall to the lower level of Lake Ontario, these waters turn the giant turbines, generating the electric power which operates most of the factories in Buffalo, and along the Niagara Frontier.

"Industrial growth is largely northward along the Niagara River, and, eventually, within the lives of men now living, Buffalo is to be the base of a great industrial center extending to and including Niagara Falls, fortified forever by the possession of practically unlimited hydro-electric power, inher-

ently cheaper than any other source of supply.

"Buffalo not only supplies the needs of millions of consumers, but is a most healthful and attractive place in which to live and work. Most of its streets are paved with asphalt and these pavements are kept clean. Ten-



The Electric Building, the Home of the Buffalo General Electric Company

ments are unknown and a large percentage of workingmen live in homes of their own. Ample school facilities are provided for children, with the best of material equipment, and competent teachers. Lake and river afford unusual opportunities for enjoyment in the summer time, and are augmented by beautiful parks in different sections of the city. Social service is maintained

on a high plane, there being more than one hundred institutions in Buffalo for the relief of the sick and unfortunate.

Thrift for Employes

Movement Started by J. F. Buchanan & Co., Philadelphia, Encourages Saving

The National Thrift Week which was carried out during the third week in January developed many plans to encourage saving. Long before that event, however, J. F. Buchanan & Co., electrical merchant-contractors of Philadelphia, had been working out a plan of their own to the same end.

The idea is to offer employes an incentive to save and invest, on the theory that they will be better satisfied and more contented if they learn to practice thrift.

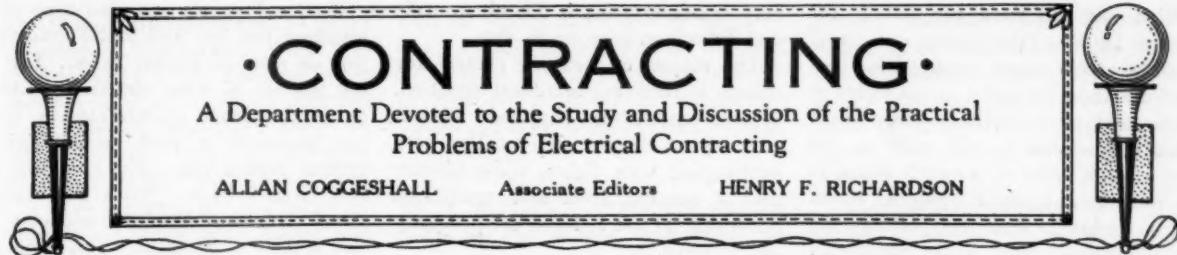
The Buchanan Company proposes to establish a thrift fund to which employes can contribute a specified sum each week for what is called the Thrift Term. An employe may pay in as little as fifty cents a week or as much as two dollars a week.

Upon completion of each Thrift Term of 52 weeks, the participating employe will be entitled to interest at the rate of five percent per annum on the amount he or she has paid into the fund; and in addition thereto the company will pay to each participating employe, upon completing his or her Thrift Term, a premium of 10 percent on the total amount which has been paid in. The company offers this premium of 10 percent as an incentive to employes to participate.

The conditions of this plan have been carefully worked out. Upon the completion of a full Thrift Term a participating employe may either withdraw what he has paid in, plus the stipulated interest and the company's premium, or in exchange for this takes a Thrift Certificate, the value of which is \$30, for each \$29.25 to which they are entitled.

The Thrift Certificates will draw interest from the date of the certificates at the rate of seven percent per annum, payable semi-annually on the 1st days of January and July of each year. The purpose of the Buchanan Thrift Certificate is to encourage participants in the Thrift Fund to continue to save the money which they have accumulated through it.

The company makes it clear that it is the intention of this proposition to help employes to help themselves.



(Panel Boards—Continued)

Panel boards, where several are to be connected to a feeder, may be designed to be connected in any one of several ways. Double lugs may be provided at bottom of panel for full size of feeder, the feeder being cut and ends sweated into the double lugs. Single lugs only may be provided and a tap made from the feeder without cutting the cable, either by splicing or "dosserts." As previously mentioned, most inspection departments will allow a reduction in the size of such a tap.

Where no main switch or fuses are used, single lugs are often provided, both on top and bottom of panel, the feeder being cut as with double lugs.

Main fuses are often used on panel boards where they might better be omitted. They are often used apparently as a matter of habit. A main fuse is no protection to the branch circuits, and if the bus bars are of proper size they are protected, as far as short circuit is concerned, by the main fuse at the origin of the feeder.

Feeders are often carried full size to the first panel and reduced in size from this point to the other panels. Fuses are provided to protect the reduced sized conductor. This is seldom justified as an economy when the cost of the fuses and bus bars and additional cost of small length of odd sizes of cable are considered. In such a system when a fuse blows there is often considerable delay in locating the blown fuse. It would seem to be better engineering to concentrate all feeder fuses at the main switchboard.

Main switches are often provided on the panel boards as a matter of habit. The only reason for a main switch on a panel board would seem to be to open all circuits at once. There are some cases where this is desirable, but probably nine tenths of the main switches installed on panel boards are never used. Remote controlled main switches may often be used to advantage. The panel board may then be located without regard to the point from which the

switch must be operated and the switch can be operated from several different locations by means of push button switches. In any event where there is any need of a main switch it should generally be either dead front or remote controlled type, and should not be fused.

It is often required that panel boards be divided into several sections connected to separate feeders, such as for exit lights, stair lights, corridor lights, electric sign, etc. It is usually economical to place such sections in one box, but with separate gutters around each section. All sections may usually be covered by a single door unless separate locks are required. Where a single door is used to cover a number of sections, the door of course covers the entire area of the box, including gutters which are already covered, but this is cheaper than a number of small doors.

In large country houses it is often desired to light a number of lights throughout the house by a single button in the master's bedroom. Where the total number of lights so controlled are not greater than the capacity of a local switch, this is a simple matter to take care of. However, where there are a large number of such lights, the desired result can be accomplished by a separate section in the panel board operated by a remote controlled switch.

The local switches controlling the lights which are also to be lighted from the master's bedroom should be three way switches connected as single pole on the regular circuit. The third point should be connected to the additional section of the panel board, the main

switch of which is normally open. When the switch is operated one way the lights will light on the regular circuit, and when operated the other way will be extinguished as that section of the panel is normally open. However if the button controlling this section is operated, all such lights will be lighted. On a two wire system use a single pole and on a three wire system a two pole remote control switch.

It is general practice to use two pole branch switches on lighting panel boards. However, when one side of the system is grounded, there is really no need for a switch or a fuse, either, for that matter, on the grounded side of the branch circuit connection. Unfortunately, the Code requires the fuse, but the switch can be omitted, often with considerable economy. The branch switches will then be single pole.

If then these single pole switches with their fuses be installed in one section of the panel and the fuse in the grounded leg be installed in a separate section, the dimensions and cost of the panel board may be considerably reduced. As all adjacent metal parts in each section are of like polarity, the spacings may be reduced to simply mechanical clearances and the construction of the busses is also simplified.

The single pole switches of the knife type should be somewhat more substantial than some of the cheaper double pole switches, as a single pole switch is more likely to get out of line than a double pole switch.

Specifications often require pilot lights in panel boards and sometimes require that these lights be mounted in plug receptacle bases which may be



Sectionalized Panel Board With Three Sets of Main Feeder Lugs and One Section Controlled by Remote Controlled Switch

pulled out and used for testing for blown fuses. Pilot lights on panel boards, except where arranged for testing, are about as useful as the lights in antiquated goose neck brackets which some manufacturers still stick on the top of each panel of a switch board to be located in a lighted engine room. Even lights in test receptacles are seldom if ever used, as an electrician either carries a test light in looking for blown fuses or else tests with his fingers. Such test lights are not worth their cost.

Directories should always be furnished for panel boards, giving the location of outlets supplied by each branch circuit. These may be in various forms to suit conditions. A common form consists of a typewritten list of circuit members with a description of the location of outlets such as "south corridor" or "plugs in room No. 216" etc. This may be mounted on the inside of the door under glass.

Dead front panels are often furnished with card holders under each switch handle in which cards may be inserted giving the location of outlets. Another scheme is to mount a small scale plan of the floor inside panel board door showing outlets and circuits. This is

very satisfactory but is difficult to make and difficult to keep up to date.

The subject of metering current for tenants is receiving increased attention. Where current is supplied without metering a tenant is usually very extravagant with lights, while if current is metered, rules and regulations governing the use of lights are promptly put in force.

There are a number of ways of providing for tenants' meters. If a tenant has an entire floor no difficulty is encountered. However, in a building where the space to be occupied by each tenant is not known at the time the panel boards are ordered, and where spaces are continually to be rearranged and subdivided, a flexible method of providing for meters is necessary.

One of the simplest methods consists of a box with as many sections as there are to be meters. Porcelain cutouts are then installed in each section to provide for the circuits which are to be connected to the corresponding meter. The various sections are then connected together and to the feeder. This makes a very crude job and one which must be done all over again as spaces are rearranged.

Sectional panels are also used with standard bus bar and switch construction on slate or similar bases. This is not flexible as some meters are likely to require more branch circuits than are provided in each section, while several meters may have only one or two circuits each. When the wasted circuits are considered, the economy of this scheme is doubtful. This arrangement also requires considerable rewiring of branch circuits as rented spaces are changed. A circuit may at one time be connected to the section corresponding to meter No. 1 and later be rented so as to require that it be reconnected to meter No. 6.

The so called "metering panel" provides a very satisfactory solution to this problem. The "McWilliams" type panel which is made by a number of manufacturers consists of a panel board with the circuits arranged up and down both sides of a single compartment in the usual way. Instead of the usual two or three bus bars, one common bus is provided which is connected to the grounded side of each branch switch or fuse in the usual way, and an additional bus is provided for each meter. These busses are not permanently connected to any of the branch switches or fuses. Various forms of sliding, plug, or knife blade contacts are provided whereby any of the branch switches or fuses may be connected to any of the bus bars corresponding to any meter.

With this arrangement it is not necessary to know how the space is to be subdivided until it is time to install meters at which time the contacts can be shifted around to give any desired arrangement. Also at any future time branch circuits may be redistributed among the meters without difficulty. In fact this is often found to be an objection.

It often happens that by accident or otherwise one tenant's circuits are found on another tenant's meter. This can be guarded against by providing locks which prevent the shifting of contacts without removing the locks. These panels are of course rather expensive.

Another type of metering panel which is somewhat simpler than the "McWilliams" type is the "Auth" metering panel. In this panel, instead of bus bars for each meter extending the entire length of the panel, short busses with a number of terminals are provided for each meter. Connections between these terminals and the branch switches or



Meter Control Panel and Cabinet Having One Compartment for Meter Control Panel and Separate Compartments for Meters

fuses are made with single No. 14 gauge wires arranged in a gutter. When it is desired to shift a circuit from one meter to another it is necessary to shift the corresponding connection wire to another terminal. This is a little more work than with the "McWilliams" type but it also removes the possibility of circuits being accidentally shifted and reduces the possibility of a tenant deliberately changing his circuits over to his neighbor's meter, as such a change would usually require an electrician. In this type of panel the multiplicity of contacts are also eliminated.

With any type of meter panel the meters may either be located in a

separate section or sections of the panel box, or may be mounted on the wall adjacent to panel. Considerable depth is required in boxes to accommodate meters and there usually is no advantage in this method.

Where meters are to be mounted adjacent to panel, a neater job may be made by providing a back board or angle iron frame for meters with conduits and condulets, or metal troughs for meter connections. Metal troughs extended out from panel box gutter and separated from each other sufficiently to leave space for meters, make a very neat arrangement. Spaces between these troughs may be filled with P. & B.

painted hardwood back boards for meters, or one large back board may be provided with troughs on the face. Porcelain bushings may be provided in sides of troughs for connections to meters. Covers may be arranged to be sealed.

Where meter terminals are at top or bottom of meter, such troughs may be horizontal and may extend directly out from side of panel box. Where meter terminals are on side of meter, then the troughs are better vertical and may be extended up or down to another horizontal trough which is extended from panel box.

(To be continued)

How to Sell Housewiring

Interest the Prospect in the Benefits to be Derived Rather Than in the Price, Which Will Lead to Future Sales

[NOTE.—The following article was prepared by a sub-committee of the N. E. L. A. Housewiring Committee, R. S. Hale, Edison Electric Illuminating Company, Boston, Chairman, who appointed a sub-committee consisting of A. L. Nelson, superintendent of interior wiring division, Commonwealth Edison Company, Chicago, chairman; C. Renshaw, National Metal Molding Company, Pittsburgh, and R. H. Tillman, Consolidated Gas & Electric Light & Power Company, Baltimore.—The Editor.]

The advance of a victorious army during the great war usually consisted of two distinct parts: A swift rush forward in which the most of the enemy were driven back, and a "mopping up," by which the conquered trenches were made thoroughly secure.

The electrical industry is apparently proceeding in the same way. The swift rush has made a deep impression on the activities of the country, but there remains for "mopping up" some fifteen million homes which have never been wired.

Estimating the number of electrical contractors as apparently 20,000, this gives an average of 750 existing residences for each contractor to wire, in addition to caring for the new buildings.

We are not making the progress that we should in this tremendous task, either in the number of houses wired, or in the thoroughness with which the work is done. This is not because we do not know how to wire, but rather because we have never applied the principles of merchandising to selling

the wiring idea. Most of us are so familiar ourselves with the advantages of being able to use electricity that we assume everyone else is equally so.

We all know that to sell electrical appliances we must paint attractive pictures for the public, of the comforts and convenience which they will secure from the purchase. In the matter of wiring, however, we have mostly assumed that a mere statement of our willingness to take orders on a partial payment was all that was necessary.

The common attitude of the electrical industry toward wiring as compared with its attitude toward the sale of appliances is illustrated nicely by two advertisements which appeared recently in the newspapers of a certain city. One of these advertisements bore the heading in large letters "Wire Your House Now" and proceeded to tell about the monthly payment plan, and to give prosaic specifications as to the kinds of fixtures which would be included, etc.

This advertisement, no doubt, was very interesting to people who had already decided to have their houses wired and who were wondering where to go to get it done. There was absolutely nothing, however, to convince those who had not reached such a decision, that they ought to have the wiring done.

The other advertisement was a good one. It carried the heading in fancy letters "Oh, Boy!" and showed a man with an electric fan blowing full in his

face. His hair and tie were waving vigorously, and he wore a smile of pleasure and contentment. After looking at the picture a moment or two, one could almost feel the breeze.

The text then began: "Why go to the seashore or the mountains when the mere touch of your finger will bring cooling sea breezes into your office, your bedroom or livingroom? Why swelter in the summer heat without ambition or energy to perform your work, when at an insignificant expense you can assure yourself of cool, comfortable, refreshing surroundings?"

This advertisement, of course, was intended to sell fan motors and not wiring, but no one can use fan motors unless his house or office is wired. By the addition or the change of a very few words this same wonderful bit of merchandising could have been made to sell wiring instead of, or in addition to, fans.

This advertisement occupied less than one-half the space of the one previously referred to, and yet I feel sure one insertion of it would have done more good in persuading people to wire their homes than a week's run of the other.

Persuading people to wire, however, is only the beginning. Having applied merchandising principles to interest prospects in wiring, we must again apply them to persuading these purchasers to adopt the right kind. Many contractors in quoting on wiring residences will begin in a very serious way, something like this:

Dear Sir:—We hereby propose to furnish labor and material necessary to install wiring and switches in the two story residence owned by you at 711 Blank Street.

The work to be done under this contract will consist of wiring.....outlets for lights;outlets for single pole switches; and.....outlets for three-way switches as follows:

Then follows a list of rooms and a table giving the number of ceiling, bracket, baseboard and switch outlets in each. Finally comes the price and terms and in curt, formal words a guarantee that the job will be done in a workmanlike manner, etc. This, of course, is all very nice, but the dealer who tries to sell washing machines on such a basis would never have to bother about the poor freight service on the railroads or the many other things which make the machines hard to get nowadays.

When a proposal is presented in the above way, the only thing the average householder can understand about it is the price. Regardless of how low the price may seem to the contractor, it looks high to the house owner. His first thought, therefore, is "what are these outlets, anyhow, and why do I need so many of them?" and off the list comes the baseboard receptacles and frequently some of the switches.

If we would pause occasionally to consider the customer's viewpoint on matters of this kind, the remedy for the above situation would be obvious. There are mighty good reasons for the installation of baseboard outlet switches, and so forth, and if the contractor explains these properly in presenting his proposal, most people are glad to pay the additional cost to get them. Do you not think that if a contractor should present his proposals for house wiring on the following basis, they would almost invariably be accepted?

Dear Mr. Jones:

In wiring your residence to enable you to take full advantage of the comforts and conveniences which modern electric lights and appliances afford, we propose to arrange the outlets so that fixtures can be located as follows:

1. *Porches.* One ceiling outlet on front porch controlled by switch near the door in the hall, and a similar outlets on the back porch controlled by a switch in the kitchen. You will find it quite a safeguard to be able to snap on these lights and observe persons seeking admission after dark before opening the door. Lighting the porches also makes them safer in bad weather and adds a bright cheerful appearance when visitors are coming.

2. *Halls.* One ceiling outlet in the hall on the first floor, and another on the second floor; each outlet controlled by two three-way switches.

These outlets will be so arranged that either light may be turned on or put out from either floor. In entering the front door, for instance, you can press the button which turns on the light in the downstairs hall. You can then press a second button at the same point, which turns on the light upstairs. After going up, you can then turn out either or both lights from the same point on the second floor. You can also reverse this process, turning on the downstairs light from upstairs, etc. You will readily see what a wonderful convenience this arrangement affords when coming home from an evening's entertainment or when it is necessary to go downstairs in the night under emergency circumstances.

3. *Parlor.* One ceiling outlet in parlor controlled by a switch on the wall, and one baseboard outlet.

The ceiling outlet will serve for ordinary lighting of the room, while the baseboard outlet will provide for attaching a floor lamp or a table lamp when desired. It will also provide for a vacuum cleaner.

4. *Dining-Room.* One ceiling outlet in the dining room, controlled by a switch on the wall, and one baseboard outlet.

The ceiling outlet is for lighting the room. The baseboard outlet is for attaching a percolator or toaster for use on the table. It will be arranged to receive a duplex receptacle, so that two of these devices can be attached at the same time. The baseboard outlet can likewise be used for a vacuum cleaner.

The baseboard outlet in the dining room will be connected to the fuse cabinet by an independent circuit, instead of being connected to the same wires which carry the lights. Should anything occur in operating the appliances which causes the fuse to blow, the lights will thus continue to burn instead of going out and plunging the room in darkness, as would otherwise be the case.

5. *Kitchen.* One ceiling outlet in the kitchen, controlled by a switch on the wall and one outlet at chair rail height for a duplex receptacle.

The ceiling outlet will care for the lighting, while the duplex receptacle will provide for the use of an electric flat iron as well as for any of the many other electrical helps for household work, which can now be purchased.

6. *Cellar, Laundry, Etc.* One ceiling outlet in the cellar, controlled by a switch at the top of the stairs, one ceiling outlet in the furnace room controlled by switch on the wall. One ceiling outlet in the laundry controlled by a switch on the wall, together with one outlet for a duplex receptacle, wired from the fuse cabinet by an independent circuit.

The duplex receptacle in the laundry will provide for the use of a washing machine, a mangle, an electric iron, etc. By having it on a separate circuit, you will be protected against the annoyance of being left in the dark, as explained in the case of the dining room, should any minor difficulty with any of the appliances cause the fuse to blow.

The advantage of controlling the cellar light from the top of the stairs will be obvious, and the arrangement proposed for the furnace room likewise requires no comment.

7. *Bathroom.* One ceiling outlet controlled by a switch on the wall, together with a bracket outlet above the wash stand.

The ceiling outlet will afford general lighting, while the bracket light will provide a convenient light for shaving, which you will find a great comfort.

8. *Bedrooms.* One ceiling outlet controlled by a switch on the wall, and one baseboard outlet for each of the three rooms on the second floor, and the two on the third floor.

The ceiling outlets will provide for ordinary lighting, while those in the baseboard will permit the attachment of table lamps, fan motors, vibrators, vacuum cleaners, or any other appliances which you may care to use.

You will note that in all cases we have proposed switches on the walls to control the various ceiling outlets, instead of leaving these to be controlled from the sockets on the fixtures. The wall switches should soon pay for themselves in the reduced breakage of lamps, shades, etc. In addition to this, you will find it much more convenient to locate the wall switches when entering the rooms in the dark than to locate the sockets on the fixtures.

The price for the complete installation will be \$.....payable..... We can complete the work in.....days after receiving your instructions to proceed.

Very truly yours,
SMITH ELECTRIC COMPANY.

With a proposal presented in this way, a man's interest is centered on the value he is to receive rather than on the price. In fact, with such a letter at hand, his first tendency on receiving a competitive proposal made out in the old style, and quoting a lower price, would be to feel that the second contractor was trying to sell him an inferior article. This, of course, is exactly the sort of feeling that the letter is aimed to produce.

Wonderful progress has been made in the merchandising of electrical appliances, but the matter of wiring has been more or less neglected. This condition does not give a proper balance.

There is no reason that electric house-wiring, if properly sold, should not yield a reasonable direct profit, as well as carrying with it future sales of lamps and appliances. The community needs the service which more wiring makes possible, and electrical contractors owe it to themselves and to the industry to apply to this branch of their business the same principles of merchandising which have proved so successful in selling appliances.

New Publication

Thomas Henry Day, executive secretary of the National Association of Electrical Inspectors, has issued from his office, 59 Deerfield Avenue, Hartford, Conn., a new publication called "The Electrical Inspector." It contains a report of the annual convention held in Philadelphia last fall, in addition to other matters pertaining to the organization.

Two Kinds of Business Men

"The principles of a good business man," said Herman Dexter, of the Firestone Tire & Rubber Co., before a monthly meeting of the Akron Builders' Exchange, "embody, first, a careful buyer, ability to display goods well, energetic sales policy, proper book-keeping system, collection of accounts promptly, zealously guarded credit, good bank balances, payment of bills when due, making money and being a credit to the business community.

"A poor business man is invariably an easy buyer, slow pay, slow turnover, keeps books on spindle, cannot obtain bank credit, dodges creditors, and is a liability to the community."

Fitting Fuses to Conductors

BY HUBERT S. WYNKOOP, M. E.,
In Charge of Electrical Inspection for the
City of New York

The new ampere capacity ratings for varnished cloth, which appear for the first time in the 1920 edition of the National Electric Code, bring to the front what has hitherto been a minor inspection difficulty, namely, a determination of the proper fuses to be employed when the stock sizes do not correspond with the ratings of the wires.

Some years ago Tables A and B of No. 18 were modified to bring the ratings into accord with listed fuses up to 600 amperes. Above that value, there are no "N. E. C. fuses." In accepting the new ratings for varnished cloth, however, all of us seem to have overlooked the lack of correspondence between these ratings and the list of stock fuses; so we find ourselves faced with the necessity of demanding that eight new fuse sizes be listed, or of adopting some other expedient. The table appended hereto shows this clearly; and shows, incidentally, that four of our present stock fuses—12, 40, 45 and 75 amperes—might well be removed from the list, inasmuch as it is the general practice to fuse to the wire size rather than to the capacity of some device.

In capacities above 600 amperes fuses in multiple must generally be employed, for circuit-breakers are limited to locations where they can receive expert supervision. The fuse multiples have never matched up very well with the cable ratings, and we have had to establish a ruling to guide the inspectors. Here in New York we have

thought it only rational to waive a literal interpretation of the Code prohibition of overfusing; and we have accepted the nearest value of multiplied fuses as appropriate protection for any cable. For example, we would approve two 350-ampere fuses for a 600,000 c. m., slow-burning cable, although the rated ampere capacity is only 670, and not 700.

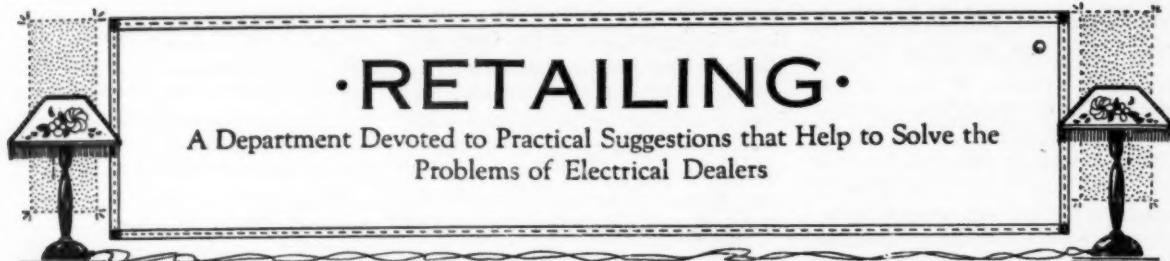
It would seem practicable to apply this procedure to the varnished cloth wire and cable, in all sizes. It is really

not necessary to follow commercially the exact value of ampere capacity as determined theoretically from a formula. So, here in New York, we intend to accept the nearest stock size of fuse as satisfactory protection for a given size of varnished cloth conductor.

The above is merely a statement of a local solution of the difficulty. It is not claimed that other inspection departments, which adhere strictly to the Code prohibition of overfusing, are not pursuing a perfectly proper course.

Relation Between Fuses and Ampere Capacities

Amp. Cap. of Conductors Table A. Var. Cloth.	Listed Fuses Table B.	Remarks:
15	10	useless.
20	12	
25	15	
35	20	
35	25	
35	30	
35	35	
35	40	useless.
35	45	useless.
50	50	
55	55	
60	60	
65	65	
70	70	
70	75	useless.
80	80	
85	85	
90	90	
95	95	
100	100	
110	110	
120	120	
125	125	
150	150	
175	175	
180	100	new size required, or change rating of wire to 175.
200	200	new size required, or change rating of wire to 200.
225	225	new size required, or change rating of wire to 250.
270	275	useless, unless wire size is changed to 250.
275	300	new size required, or change rating of wire to 275.
325	325	
330	325	new size required, or change rating of wire to 325.
390	375	keep for multiplying.
400	400	new size required, or change rating of wire to 400.
450	450	new size required, or change rating of wire to 500.
500	500	new size required, or change rating of wire to 550.
550	550	
600	600	
650	600	use two 325-650.
660	680	use two 325-650.
690	720	use two 350-700.
730	760	use two 350-700.
770	780	use two 375-750.
810	830	use two 375-750.
850	840	use two 400-800.
890	880	use two 400-800.
930	920	use two 400-800.
970	970	use two 400-800.
1010	1000	use two 400-800.
1050	1020	use two 450-900.
1070	1080	use two 450-900.
1120	1150	use two 450-900.
1160	1160	use two 450-900.
1210	1220	use two 500-1000.
1260	1290	use two 500-1000.
	1360	use two 550-1100.
	1430	use two 550-1100.
	1490	use two 550-1100.
	1550	use two 600-1200.
	1610	use two 600-1200.
	1670	use three 450-1350.
		use three 450-1350.
		use three 500-1500.
		use three 500-1500.
		use three 550-1650.
		use three 550-1650.



Attractive Front Pays

In a letter thanking this magazine for printing an illustration of the Gem City Electric Company store, Quincy, Illinois, Roscoe Butler of that company writes that it was expensive to install a terra cotta front, but that it was worth it, for the change almost doubled the store's business. Mr. Butler continues:

"The front is of white terra cotta with blue letters made of terra cotta which stand out very prominent. The top extends out eighteen inches, and is studded with fifty watt white mazdas set in blue stars. The plate glass is set in copper trim with marble base, and tile entrance in white with our name in blue letters.

"Each window is flushed underneath with six inches of cement. We never have any frost on the windows. Our windows and second floor are flooded with light and combined with the lamps on top, the place shows up so bright at night that everybody just has to look whether they want to or not. The lights are not turned off until 10:30 at night.

"We hire a professional window trimmer to change our window every week, which more than pays for itself. We have had people stop in from all over the country and ask us where we got our front. Last month we received a letter from an electrical dealer in New Jersey asking us where he could get a duplicate of it.

"We feel very proud of our front and can recommend it to anyone contemplating a change, as it certainly will increase their business."

Flying Circus Going Strong

Big Merchandising Demonstration and Conference Conducted by General Electric and Allied Companies

To help the jobbers, central station men and retailers in the electrical trade increase their business through better window displays, advertising and sales methods in general, a traveling conference and exhibit conducted by nine manufacturers of electrical appliances

is touring the principal cities of the country.

It appeared in New York City, January 10 to 15, where it was attended by a large number of dealers. On January 17 and 18 it was in Newark, and on the next two days in Philadelphia, where it proved so popular that there was standing room only. Other cities where it has appeared are Baltimore, Pittsburg, Columbus, Cleveland, and Toledo.

The itinerary for the first part of the trip included Buffalo, February 2-3, and Syracuse, February 4-5. The tour will be from coast to coast and will end about May 15. It is expected that approximately 20,000 dealers, jobbers and central station men will be reached by it.

The companies participating in the undertaking include the General Electric Company and its following allied or associated companies: Edison Lamp Works, Duplex Lighting Works, Ivanhoe-Regent Works, Sprague Electric Works of the G. E. Company, Hurley Machine Company, Edison Electric Appliance Company, Electric Vacuum Cleaner Company, and Trumbull Electric Company.

Two days on the average are spent in each town visited. The conference is

planned in two sessions, afternoon and evening. Advance notice is sent to the distributing jobber, who invites his customers in the retail and central station field to attend.

During the meeting merchandising specialists present in a concise and interesting manner, data pertaining to and applications of the electrical products manufactured, as well as covering the broad field of electrical merchandizing. The information is presented by means of talks, demonstrations, lantern slides, moving pictures and the use of a novel revolving stage.

The major subjects under treatment include the latest ideas on home, commercial and industrial lighting; home, commercial and industrial uses of electricity other than lighting; relations between advertising and selling and retail merchandising. The entire program has been so laid out as to give, in a complete form, essential information useful in promoting the retail trade in electrical devices.

One of the features of the exhibit is a talk on the best methods of selling wiring devices, by W. D. Yates of the wiring device section of the supply department of the General Electric Company. This talk is illustrated by a scene showing the use of the tumbler

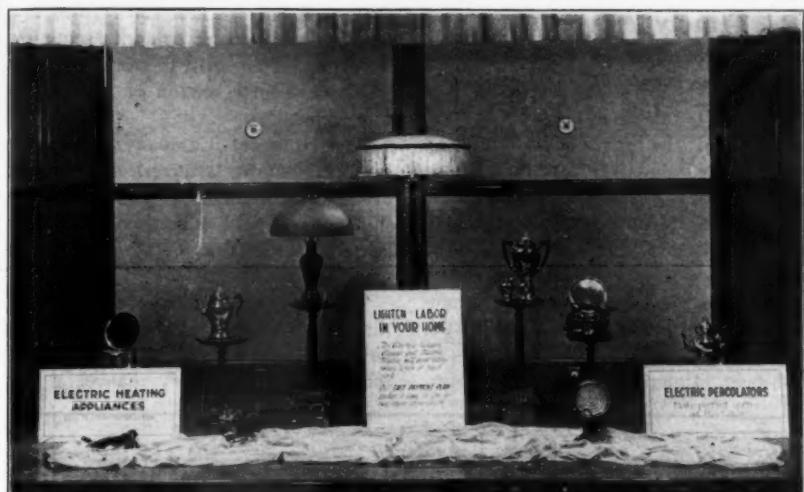


Mazda Lamp Window Display of Merchandising Conference and Exhibit

March, 1921

ELECTRICAL CONTRACTOR DEALER

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Store Window Display Shown on Revolving Stage at Traveling Electrical Merchandising Conference and Exhibit

switch, and an inspiring discussion on selling complete wiring jobs for the home and office as well as the need for wiring device standardization.

T. J. McManis of the Edison Lamp Works discusses the advertising support given the dealer through localized publicity, coöperative dealer helps, national advertising campaigns and commercial service investigation.

No little interest is being displayed in the discussion of lighting fixtures by J. M. Smith, Ivanhoe-Regent, and Guy P. Norton, Duplex Lighting Works, supplemented by demonstrations of the use of the fixtures and the principal talking points connected with their successful sale to the consumer.

Kolin Hager of the merchandising service bureau of the General Electric Company, discusses the advantage of correct and careful window display and trimming.

D. W. MacCready has another interesting discussion on the merchandising of supply specialties, and T. J. Casey, Hurley Machine Company, speaks of the washing machine business and its relation to advertising.

One of the principal discussions is by A. L. Powell, lighting service department, Edison Lamp Works, on store and home lighting in which the revolving stage is used to its best advantage.

Beginning with a miniature store window display, Mr. Powell demonstrates the use and effect of different colored light. He then turns to the subject of home lighting, showing on the stage the good and bad effects of home lighting in various rooms of the house. The stage on which these scenes are shown

revolves by an electric motor, each quarter turn introducing a different scene.

A scene changing arrangement is obtained by dividing the walls of the rooms into an upper and lower half, each of which moves independently. This allows the upper half to revolve, bringing into view a substitute arrangement of fixtures and lights completely changing the appearance of the room. When an entire change of scene is desired, both halves revolve in opposite direction and in a few seconds another room is presented to the audience. New displays are prepared behind the wings

while the speaker is talking about the one in view.

Ample baseboard, wall and ceiling outlets are provided to meet any condition desired. This stage occupies a floor space approximately 14 feet by 12 feet, and requires head room of not less than 12 feet. The front is so built as to furnish the usual proscenium arch of a stage, made of handsome mahogany and furnished with drop curtain, footlights, spot lights and all the detail of a complete theater equipment.

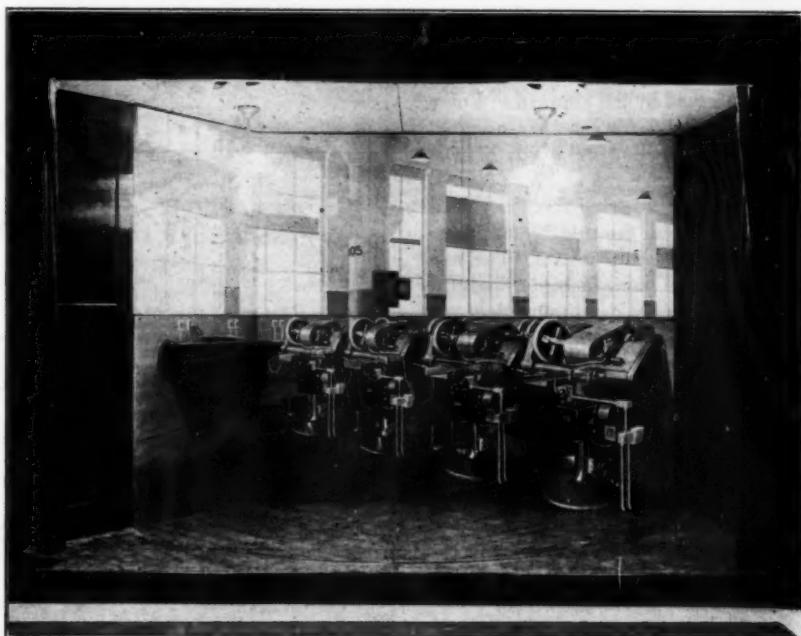
This demonstration of good home lighting practice is another feature of the "Flying Circus" which has attracted the great interest of electrical men wherever the exhibit has been shown.

Lantern slides, of electric heating devices for the home plays an important part in the discussion by H. H. Russell of the Edison Electric Appliance Company, H. S. MacWhorter of the Electric Vacuum Cleaner Company demonstrates, by moving pictures, the talking points in the sale of cleaners.

The program is concluded by a discussion of industrial lighting by R. E. Harrington of the Edison Lamp Works.

Following the merchandising exhibit and conference proper the next day is devoted to a round table conference with jobbers' salesmen in the territory visited. The circus then passes on to the next city to be visited.

If you do not employ a bookkeeper, get the New Business Record.



Industrial Lighting Exhibit at Merchandising Conference

Had to Change Name

W. H. Vilett, treasurer of the Northland Electric Supply Company, 211 South Third Street, Minneapolis, Minn., writes as follows:

"Last year I had contemplated being with you at Baltimore to take in the convention, but owing to getting under way in a new business, found that it was impossible to leave at the proper time. I have read with a great deal of pleasure the November and December issues and have even gone so far as to check over the attendance list to see how many I knew that were present. A. L. Abbott of St. Paul certainly had a fine paper on "Managing an Electric Contracting Business," and I hope that all of the readers of the journal will study it carefully.

"After doing a half million dollars' worth of supply business in ten months, we found that it was necessary to change our name.

"When commencing business, we assumed the name of Triumph Electric Company, under which to conduct a purely electrical supply business.

"The Triumph Electric Company of Cincinnati, Ohio, a manufacturing company of motors and generators, objected to our use of that name. The court has held that we do not have the right to use same.

"We have, therefore, adopted the name Northland Electric Supply Company, under which we will continue to do business as heretofore."

Reason for Hustling

In the February issue of the Currant Monthly, issued by the Howard P. Foley Company, electric service, Washington, D. C., are the following words of wisdom:

There is an old saying that "any dead fish can float with the tide," but it takes a live fish to swim up stream. The successful business man, facing a doubtful situation in general conditions, does not sit down to wonder and wait. He sees in it all the more reason to hustle. He pushes all the harder for business and usually gets all he can handle—and more—while his hesitating competitors are deplored the slowness of things.

A doubtful period is the wrong one in which to hesitate. When in doubt, boost—push—hustle! Dig up all the business you can. Keep up your stock as well as your good spirits. If conditions don't suit you, change them! Make prosperity!

Timely Advertising

Merchant-Contractor of Sacramento, California, Turns Table on Comic

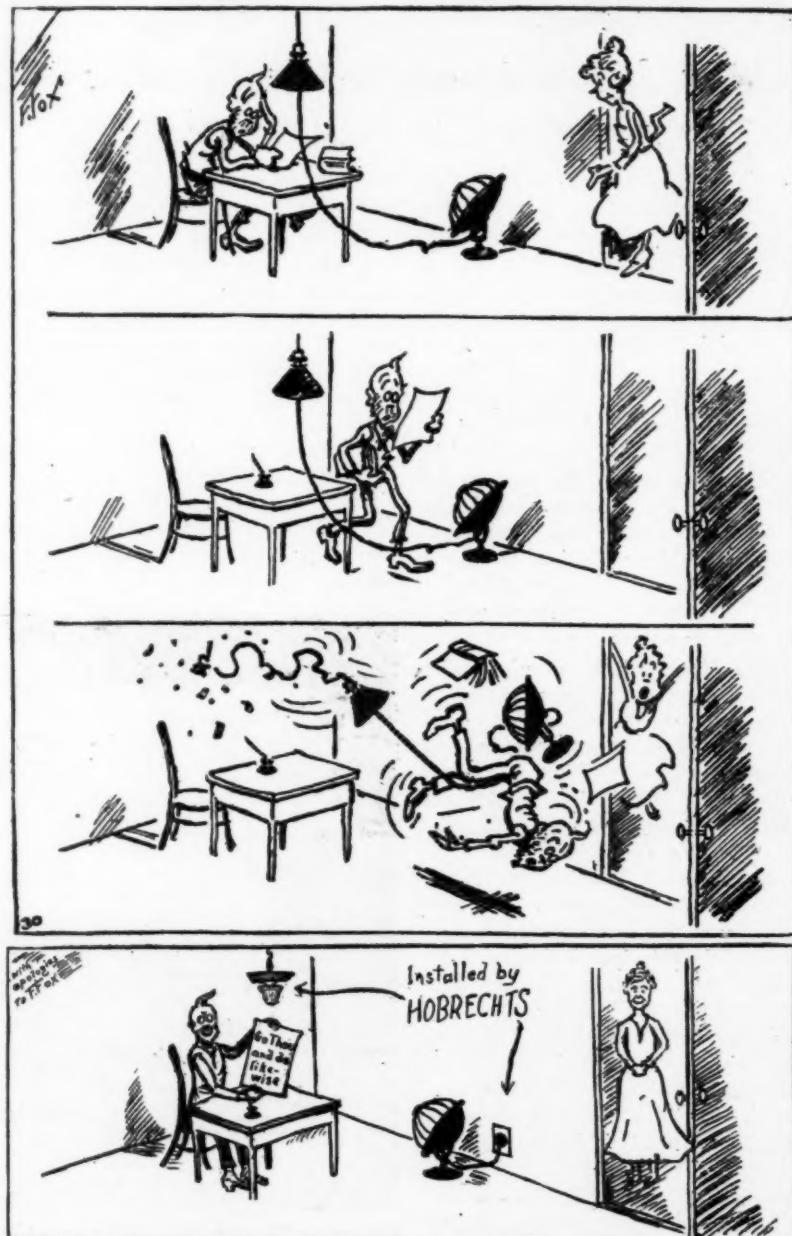
Recently there appeared in the columns of the Sacramento Union a cartoon by Fountaine Fox, the humorous illustrator. This particular comic portrayed an electric heater attached to a dropcord lamp, the joke being on the man that tripped on the dangling cord.

The three top sections of the accompanying reproduction comprises the original cartoon in question. J. C. Hobrecht Company, electrical mer-

chants of Sacramento, California, saw the joke and decided to add a sequel to it. They set an artist to work, and as a result the fourth section of the cartoon was added.

The Hobrecht Company, while the original joke was still fresh in the minds of readers, published the illustration shown as a paid advertisement, which caused a great deal of favorable comment and discussion.

This is an admirable example of timely advertising and shows that the company which is responsible for it must be awake to every chance.



Lower Panel Shows Sequel to Artist's Joke Which is Shown in Three Top Panels



ORGANIZATION ACTIVITIES
A Department Devoted to the Reports of State and Local Meetings

STATE CHAIRMEN AND SECRETARIES

State	Chairman	Secretary	State	Chairman	Secretary
ONTARIO, CANADA:	E. A. Drury, 164 Oakwood Av., Toronto	J. A. McKay, 110 Church St., Toronto	MASSACHUSETTS:	Geo. B. Quincy, Boston	J. E. Wilson, 263 Summer St., Boston
BRITISH COLUMBIA:	E. Brettell, 781 Granville St., Vancouver	R. H. Hargreaves, Bus. Mgr., Vancouver	MICHIGAN:	Henry Roseberry, 41 Pearl St., Grand Rapids	H. J. Shaw, 613 Lincoln Bldg., Detroit
CALIFORNIA:	C. L. Chamblin, 643 Call Bldg., San Francisco	J. W. Redpath, 643 Call Bldg., San Francisco	MINNESOTA:	Emil Anderson, 240 Plymouth Bldg., Minneapolis	Roy Constantine, 2385 University Ave., St. Paul
COLORADO:	J. Fischer, Denver	W. A. J. Guscott, Denver	MISSOURI:	W. J. Squire, Kansas City	A. J. Burns, 533 Delaware St., Kansas City
CONNECTICUT:	E. S. Francis, 272 Asylum St., Hartford	Geo. M. Chapman, 43 E. Main St., Waterbury	NEW JERSEY:	Geo. E. Davis, 23 Central Ave., Newark	Elmer D. Wilson, Newark
DISTRICT OF C. O.:	Frank T. Shall, Conduit Rd. and Elliott St., Washington	H. R. Harper, 635 D St., N. W. Washington	NEW YORK:	F. A. Mott, 29 St. Paul St., Rochester	J. P. Ryan, 26 Cortlandt St., New York City
FLORIDA:	T. E. Satchwell, Jacksonville	J. G. Spenser, Palatka	OHIO:	G. M. Belthoozer, 4th and Plum Streets, Cincinnati	Walter B. Keefer, 939 E. McMillan St., Cincinnati
GEORGIA:	Henry Morton, 1227 Broad St., Columbus	C. B. Anderson, Walker El. & Plain Co., Columbus	OREGON:	Roy C. Kenney, Bayside St., Portland	F. R. Whittlesey, 212 Henry Bldg., Portland
INDIANA:	A. B. Harris, Gary	A. I. Clifford, 309 N. Illinois St., Indianapolis	PENNSYLVANIA:	R. W. Keck, Allentown	M. G. Sellers, 1518 Sansom St., Philadelphia
IOWA:	Louis L. Corry, 510 Brady St., Davenport	F. Bernick, Jr., 208 High Ave., W. Okaloosa	TENNESSEE:	P. W. Curtis, Chattanooga	J. A. Fowler, 10 S. Second St., Memphis
KANSAS:	R. M. Sutton, 125 N. Market St., Wichita	H. S. Lee, 816 Kansas Ave., Topeka	WASHINGTON:	S. G. Hopler	Forrest E. Smith, 205 Boston Block, Seattle
LOUISIANA:	C. S. Barnes, 513 Gravier St., New Orleans	R. S. Stearns, 336 Camp St., New Orleans	WISCONSIN:	B. L. Burdick, 72 Water St., Milwaukee	H. M. Northrup, 25 Erie St., Milwaukee
MARYLAND:	S. C. Blumenthal, 505 N. Eutaw St., Baltimore	C. Philip Pitt, 15 E. Fayette St., Baltimore			

List of Local Associations and Meetings

State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.	State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.
CALIFORNIA					NEW JERSEY				
Long Beach	A. R. Dunn	217 Syndicate Bldg.	Tues. Evening	-----	Atlantic City	F. P. Wright	16 Ohio Ave.	1st Thursday	Malatesta Hotel
Oakland	East Bay Elec'l Trades Ass'n	-----	Tuesdays 8 P.M.	-----	Jersey City	Wm. Doellner	743 Bergen Ave.	1st Monday	23 Central Ave.
Paso Robles	Mr. Castle	-----	-----	-----	Newark	Geo. E. Davis	25 Central Ave.	Last Friday	P. S. Bldg.
Sacramento	J. A. Woods	645 New Call Bldg.	Twice a month Sat. 12:15 P.M.	States Cafe	Paterson	H. M. Desai	88 Ellison St.		
San Francisco	L. R. Ardonin	227 Coronado Bldg.	Mondays 8 P.M.	227 Coronado Bldg.	NEW YORK				
Colorado	L. B. Roberts	Waterbury 45 Preston St.	Call of Sec'y	118 Asylum St.	Albany	E. A. Jones	31 Hudson Ave.	1st Thursday	Pekin Rest'nt
Denver	G. M. Chapman H. D. Hitchcock	836 12th St., N. W.	2d Thurs. ea mo., 8 p. m.	Dewey Hotel	Binghamton	A. H. Hyde	-----	1st & 3d Monday	Johnson Bldg., 12 Nevins St.
CONNECTICUT		Saveenwall & Joseph Elec. Co.	1st Tuesday each month	208 Realty Bldg.	Brooklyn	H. W. Walcott	555 Wash. St.	8:30 P.M. Fridays	507 Elec. Bldg.
Ansonia		Care Biscayne & Elect. Sup. Co.	Twice a week	-----	Buffalo	E. P. McCormick	555 Wash. St.		
Hartford		179 W. Washington St.	-----	-----	Kingston	M. C. Riverbend	Huntington		
Dist. Col.	H. P. Foley	836 12th St., N. W.	2d Thurs. ea mo., 8 p. m.	-----	Nassau-Suffolk	J. A. Palmer	White Plains		
Washington		Saveenwall & Joseph Elec. Co.	1st Tuesday each month	-----	Westchester	I. W. Austin	26 Cortlandt St.	1st Thru. 1st & 3d Wed.	Penn's Hotel
Jacksonville	W. L. Joseph	2nd & 4th Wednesday	-----	-----	Watertown	L. B. Smith	22 New Chambers St.	1st & 3d Wed.	McAlpin Hotel
Miami	C. E. Debrauer	2nd & 4th Wednesday	-----	-----	N. Y. Sec. No. 1 Independent	J. P. Ryan	First St.	1st Thru. 1st & 3d Wed.	
ILLINOIS		2nd & 4th Wednesday	-----	-----	John Penas	H. W. Bowder	322 Lafayette St.	1st Monday	
Chicago	J. W. Collins	2nd & 4th Wednesday	-----	-----	Sec. No. 3 Ass'd. El. Con.	L. F. Lueddecke	12 S. High St.		
E. St. Louis	O. J. Birmette	2nd & 4th Wednesday	-----	-----	H. S. Beideman	B. B. St. John	939 E. Main St.	Tuesdays	
E. Moline	E. J. Bairnes	2nd & 4th Wednesday	-----	-----	Rochester	A. Zimmerman	35 Main St.	3 P.M. Mon. 6:45 P.M.	Builders' Exch.
Peru	J. Weingate	2nd & 4th Wednesday	-----	-----	Schenectady	Mr. S. Ziegler	935 Main St.	1st & 3d Thurs.	
INDIANA	C. E. Jett	2nd & 4th Wednesday	-----	-----	Syracuse	H. N. Smith	Ernest Hopkins	2d Wed.	Gas Office
Evansville	A. B. Harris	2nd & 4th Wednesday	-----	-----	Troy	A. H. Bowder	Hood Elec. Co.	2d & 4th Fri.	Elec. Co.
Gary		2nd & 4th Wednesday	-----	-----	Utica	A. Stiefvater	Mon. 6 P.M.	Mon. 6 P.M.	Chamber of Commerce
Indianapolis	Geo. L. Skillman	2nd & 4th Wednesday	-----	-----	Akron	L. C. Wall	12 S. High St.	Tuesdays	Builders' Exch.
Iowa		2nd & 4th Wednesday	-----	-----	Cincinnati	W. R. Keefer	939 E. Main St.	3 P.M. Mon. 6:45 P.M.	Builders' Exch.
Waterloo	J. A. Harleip	2nd & 4th Wednesday	-----	-----	Cleveland	G. D. Biery	35 Main St.	1st & 3d Thurs.	Builders' Exch.
KANSAS		2nd & 4th Wednesday	-----	-----	Columbus	O. A. Robins	935 Main St.	2d Wed.	Builders' Exch.
Topeka	H. S. Lee	2nd & 4th Wednesday	-----	-----	Springfield	J. R. Yost	Ernest Hopkins	2d & 4th Fri.	New China Rest.
KENTUCKY		2nd & 4th Wednesday	-----	-----	Youngstown	W. W. Woback	Hood Elec. Co.	Mon. 6 P.M.	Cham. of Com.
Paducah	W. R. Kitterjohn	2nd & 4th Wednesday	-----	-----	Portland	F. R. Whittlesey	212 Henry Bldg.	2d & 4th Monday	
LOUISIANA		2nd & 4th Wednesday	-----	-----	PENNSYLVANIA	A. H. Hill	510 W. Main St.	Last Thursday	
New Orleans	R. S. Stearns	2nd & 4th Wednesday	-----	-----	Catasauqua	W. T. Kleppinger	Star Elec. Co.	1st Tues.	Builders' Exch.
MARYLAND		2nd & 4th Wednesday	-----	-----	Erie	J. H. North	35 Main St.	3rd Friday	Undw'trs Offr.
Baltimore	C. P. Pitt	2nd & 4th Wednesday	-----	-----	Lancaster	A. Deen	1518 Sansom St.	1st Tuesday	Builders' Exch.
MASSACHUSETTS		2nd & 4th Wednesday	-----	-----	Philadelphia	M. G. Sellers	C. Gen. Elec. Co.		
Boston	J. E. Wilson	2nd & 4th Wednesday	-----	-----	SOUTH CAROLINA	J. H. VanAernan	Oliver Bldg.		
Haverhill	Mr. Porter	2nd & 4th Wednesday	-----	-----	Columbia	E. L. Cashion	Sumter, S. C.		
Worcester	L. H. Treadwell	2nd & 4th Wednesday	-----	-----	Greenville	E. C. Debruhl	Ideal Elec.		
MICHIGAN		2nd & 4th Wednesday	-----	-----	TENNESSEE	I. Thurnmond	1104 Market St.	Wednesday	
Grand Rapids		2nd & 4th Wednesday	-----	-----	Knoxville	H. M. Moses	615 Market St.	Noons.	
MINNESOTA		2nd & 4th Wednesday	-----	-----	Memphis	H. A. Street	285 Madison Av.	Monthly	
Duluth	Alfred L. Foster	2nd & 4th Wednesday	-----	-----	Nashville	J. B. Muller	Arcade	other Wed.	
Minneapolis	Roy Constantine	2nd & 4th Wednesday	-----	-----	TEXAS	P. B. Seastrunk	Lepscome Elec. Co.	1st & 3d Wed.	
St. Paul		2nd & 4th Wednesday	-----	-----	VIRGINIA	K. D. Briggs	-----		
MISSOURI	Roy Constantine	2nd & 4th Wednesday	-----	-----	Wisconsin	H. M. Northrup	23 Erie St.	2nd Tuesday	Arcade Bldg.
Kansas City	L. G. Shumaker	407 E. 15th St.	2d & 4th Mon. 6:30 P. M.	University Club	Canada	H. R. Hargreaves	Pacific Bldg.		Maryland Hotel
St. Louis	A. J. Dunbar	Frisco Bldg.	Tues. Evenings	Am. Hotel	Vancouver				
NEBRASKA		T. Mustain	Wed. Evening						
Omaha		315 Neville St.							

Associations can secure listings here by sending necessary data to the National office

Rousing Reception Given to National Headquarters' Representatives in Canada

With General Manager Morton at Toronto and Special Representative Davis at Vancouver, Dominion Holds Enthusiastic Meetings

When making out lists of active co-operationists, don't forget to include the Dominion of Canada, our loyal neighbor to the north of us. For electrical interests in Canada are most enthusiastic in their efforts to get together, and the true spirit of coördination is their avowed purpose.

Full credit should be accorded Wm. L. Goodwin and Samuel Adams Chase for starting the widespread coöperative movement in Canada. Many meetings have been held by these tireless workers in which the gospel of good will has been put forth in the most convincing terms, the results of which set the ball of coöperation in motion.

Great credit is also due to those loyal men in Canada, representing the various branches of the electrical industry, who have worked together for the accomplishment of the worthy ends that are plainly in sight; for it is now a matter of only a short time when the entire Dominion of Canada will be solidly organized.

A few months ago M. C. Turpin of the Westinghouse forces and Wm. L. Goodwin held enthusiastic meetings in the Province of Manitoba, which is about the middle section of the Dominion, and last month National Headquarters covered both ends, Special Representative Davis working in British Columbia on the Pacific Coast and General Manager Morton holding forth in the Province of Ontario at about the same time.

Kenneth A. McIntyre of Toronto, member of the National Executive Committee for the Canadian Division of the National Association of Electrical Contractors and Dealers, had arranged for W. H. Morton from Headquarters to talk before a meeting of the Toronto District on February 3. But when Mr. Morton arrived at the scene of action he found that Mr. McIntyre had prepared a series of meetings, confabs, and get together conferences that kept the general manager busy for a stretch of thirty-six hours.

It was a well planned program that the committee had laid out, as it gave Mr. Morton the opportunity of per-

sonally meeting representatives of all the various interests engaged in the electrical industry in Toronto and surrounding territory. The Executive Committee of the Toronto District consists of Dr. W. R. Carr, J. A. McKay, Geo. T. Crose and E. L. Roxborough.

When Mr. Morton was met at the train and escorted into the business dis-

their utmost to perfect a solid organization of electrical interests, he said, and their efforts are sure to bring results, for they are ever active and earnest in their endeavors and are working harmoniously along the prescribed lines.

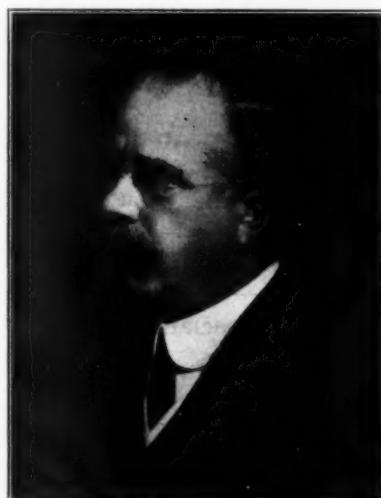
Mr. Morton held an interesting conference with the Honorable Frederic Nicholls, president of the Canadian General Electric Company, Ltd., and also belonging to the Canadian Senate. Senator Nicholls said that the enterprise which later developed into the present company was founded by him thirty-two years ago with a capital of only \$10,000, and that the present assets are in the neighborhood of \$32,000,000.

An unusual coincidence related by President Nicholls is that he was thirty-two years of age when he formed the original company and that he now has been connected with it just thirty-two years.

The Canadian General Electric has its headquarters in Toronto, but maintains offices and warehouses in fifteen prominent cities of the Dominion, including Montreal, Quebec and Ottawa, and covering the provinces from Nova Scotia and New Brunswick to British Columbia.

Senator Nicholls said that the present conditions of business depression are bringing about increased activities in the electrical industry because of the more economical operation of the industries and utilities through electricity. In speaking of Canada's progress along these lines he said that approximately 2,000,000 hydro-electric horsepower is at present developed, and a further 1,200,000 horsepower is in process of development and should be available for use within the next two years, making a total of 3,200,000 horsepower which should be ready for use in 1922.

He said that even this great increase in the national output of electrical energy will not suffice, as the demand is increasing in greater ratio than is the development, but fortunately Canada occupies a commanding position amongst the countries of the world in the ownership of water powers of great



Hon. Frederic Nicholls

district of Toronto, he doubtless felt as though he comprised a three ring circus all by himself. Large placards announcing his visit adorned the display windows of the electrical stores on the main thoroughfares and his coming had been heralded far and wide.

After being introduced to a number of prominent electrical men around the city, Mr. Morton was taken to the Hotel King Edward to attend a business meeting of the Toronto District Executive Committee. There he joined in discussing plans for the development of the work in Canada and gave assurances of the support and assistance of National Headquarters.

The afternoon was spent in explaining the work of the association throughout the country. In an interview Mr. Morton stated that he was deeply impressed with the enthusiasm displayed by our Canadian members in the coöperative movement. They are doing

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extent and volume. These can be developed as the need arises, and will prove of great advantage in the world wide competition for industrial supremacy and the ability to continue to give increasing employment to the industrial population.

The co-operative movement in Canada has the active endorsement and support of Senator Nicholls and his associates, and he assured Mr. Morton that he was pleased to learn that the National Association was lending its assistance in the development of this worthy work.

On the evening of Thursday, February 3, the Toronto District of the Ontario Association of Electrical Contractors and Dealers gave a dinner and held a get together meeting at the Hotel Mossup in that city, which was attended by a hundred enthusiastic supporters of the cause, including representatives from Hamilton, Brantford, and Kitchener.

E. A. Drury of Toronto, who is chairman of the Ontario Association, presided at the meeting, at which the regular business was transacted before the guest of the evening was introduced. Mr. Morton's address on the work of the National Association is printed in full on another page of this issue.

A spirited discussion of Mr. Morton's address consumed a half hour and the questions indicated the intense interest shown by the Canadian Division in organization affairs. The discussion also brought out fairly clearly that Hamilton and Kitchener will join the Ontario Association, which will add to it fourteen new members.

As an added attraction the Elder quartet entertained the diners with a number of pleasing selections. This is a male quartet which sings without accompaniment, and was secured for this meeting through the courtesy of its leader, Mr. Gardner of the Masco Supply Company, a local electrical jobbing house.

This meeting was pronounced a huge success by all who were in attendance, and it afforded the general manager of the National Association further opportunity of getting acquainted with the unadulterated brand of Canadian enthusiasm.

Mr. Morton was surprised to learn that he also was announced as the guest of the Electric Club of Toronto for a luncheon engagement Friday noon. After introducing representatives of the Radial Railway System, also guests of

the club, he was introduced by Geo. D. Perry, president of that organization, to address the gathering on what was termed the biggest problem in the electrical industry, "How is the Hydro Development to Keep Pace with the Demand?"

Due to the fact that on this side of the border we are not so far advanced in the development of water power, Mr. Morton stated that he felt that he was unable to fully answer this question on purely technical grounds. He admitted that it indeed was a big problem which they had honored him with solving, but that other industries had their problems too, and while he realized that other branches of the electrical industry also



George D. Perry

had problems to solve, so far as he was personally concerned he could offer aid only from the viewpoint of the National Association of which he is an officer.

Mr. Morton said that he believed the question of ample power is one that is giving a great deal of concern to utilities throughout both countries, and that of course the one word that sums it all up is development. There must be development of water power and development of facilities throughout the field of electricity.

Canada, he said, is handicapped, however, by two things—low rates and the tremendous demand which has been created through the educational work of our association with the active efforts of your local contractor-dealers in creating such an immense increase in the use of electricity and the adoption of electrical appliances in the home. You must now develop your power to meet this great demand.

It having been announced that Mr. Morton had been connected with the fruit industry in Porto Rico, he referred to that business and its problems, saying that growers and shippers in that line have practically the same conditions to face as the manufacturer and

jobber in the electrical industry; and that about the only difference he could see was that one handles the natural juice while the other is handling the artificial juice.

He believes the big problem for all concerned is to get the business and then handle it properly. He said that after the strenuous time spent at Toronto since he turned himself over to the local contractor-dealers, he did not believe that this branch of the industry required an urge to hustle, for they would surely get all that was coming to them if they hustled for business to the extent that they made their guest hustle.

Mr. Morton made it plain that the National Association is not out to demand larger differences in cost and selling prices. The main purpose is to make its members more efficient business men; to perform the sort of educational work that will make better merchants; and when it is proven that contractor-dealers are efficient distributors, then leave it to the manufacturers and jobbers to see that they are properly compensated.

In closing, Mr. Morton urged his hearers to continue in their effective co-operative efforts, assuring them that only by such methods could the greatest good be accomplished; for he said "co-operation simply means to so conduct yourself that others are able to work with you"—and the results prove that Canadian interests have been doing that very thing.

At the close of Mr. Morton's talk he was greeted with prolonged applause and congratulations on his presentation of the subject discussed. Mr. Morton expressed himself as being greatly impressed with the enthusiasm displayed throughout the entire course of his Canadian visit.

Western Canada Visited

James Lightbody, honorary secretary of the British Columbia Electrical Co-operative Association send the following account of recent activities in Vancouver:

Laurence W. Davis, special representative of the National Association of Electrical Contractors and Dealers, and A. C. McMicken, sales manager for the Portland Railway Light and Power Company and vice president of the North West Electrical Service League, were the speakers at a dinner attended by 125 electrical men of Vancouver, British Columbia, on January 31. The

dinner was held under the joint auspices of the British Columbia Electrical Coöperative Association and the Vancouver Association of Electrical Contractors and Dealers. It was one of the most enthusiastic gatherings ever held in this city and great benefit is expected to come from it.

The chair was taken by W. G. Murrin, assistant general manager of the B. C. Electric Railway Company, while Mr. Davis was introduced by W. W. Fraser, president of the local Contractors and Dealers' Association, and Mr. McMicken by E. E. Walker, sales engineer of the B. C. Electric Railway Company and chairman of the advisory council of the B. C. Electrical Coöperative Association. Mr. McMicken urged coöperation between all branches; told of the results of such programs in California and the progress of these activities in Washington and Oregon. Mr. Davis spoke directly to the contractors and dealers, urging cost accounting and better business methods. Both speakers were given rousing votes of thanks for their excellent addresses.

Mr. Davis spent two days in Vancouver circulating among contractors and dealers, jobbers and central station officials and undoubtedly left a great impression upon the industry in Vancouver. He held a second meeting for contractors and dealers endeavoring to straighten out some of the local troubles.

The Coöperative Association was started in Vancouver last September and has had the support of central stations, manufacturers, jobbers, and to a certain extent contractors and dealers. The future of the industry in Vancouver appears to be very bright, as its development is expected to progress at the same rate as the whole Pacific Northwest is progressing and the opening of spring is expected to see a rapid recovery of business in which the electrical trade will obtain its share.

Iowa Association Meets

Large Gathering in Attendance at Annual State Convention

The Iowa State Association of Electrical Contractors and Dealers met in annual convention at Davenport on Wednesday and Thursday, January 26 and 27, with an attendance of more than a hundred members and guests, representing all branches of the electrical industry.

The entertainment features included a fine banquet at the Blackhawk hotel and theatre parties on Thursday evening. On Wednesday morning the meeting was called to order by W. A. Robb of Moline, president of the Tri-City Electric association.

Mayor C. L. Barewald of Davenport gave the address of welcome. "Our greetings are given with real sincerity," he said: "We deem it an honor that you should have selected Davenport for your convention. I hope that when your business here is finished you may return to your cities knowing that your convention has accomplished a good work."

C. H. Keller of Dubuque, president of the state association, replied to the mayor's address.

The principal talk of the morning was given by F. J. Bernick, jr., secretary of the association. It was of great interest to those in the electrical business.

The secretary outlined the growth and progress of the Association during the past three years and called attention of the contractor-dealer members to the fact that the Association had attained a growth which would make it practically impossible for any of our members to continue to fill the office of secretary of the Association, owing to the fact that the details of the office would prove so burdensome that it would be difficult for such a member to maintain his business establishment and at the same time care for the best interests of the Association. A general outline was given of the needs of the Association financially and the prospective growth of the association in membership from the material available in the state.

Howard W. Harrington of Moline gave the most interesting address of the day when he spoke at the second session. Mr. Harrington's subject was "What's Ahead in Business."

"There are four cycles in any business," he said. "The first cycle is the expansion period; the second is the depression or liquidation period; the third is the readjustment period and the fourth is another period of expansion.

"The 'low' of each depression period seldom if ever reaches the first low of the volume of business. The line of advance of business is steady, if a bit uneven. We are now largely through the readjustment period and ahead of us is another period of expansion. The time that this expansion will occur de-

pends largely on the constructive selling efforts that the merchants will put forth.

"Advertising is one of the greatest stabilizers leading to the period of better and enlarged business. This is evident from the success of the company advertising continuously as compared with the companies which do not advertise persistently and consistently."

C. R. Robbins of Moline was the principal speaker of Thursday morning's session, his talk on "Estimating" being illustrated with a chart. Speakers of Thursday afternoon's program were J. M. Crotty of Chicago, whose topic was "Credit and Finances—Trade Acceptances" and E. J. Burns of Rock Island on "The Building Situation."

"The business volume of the electrical industry was not nearly so great as would have been the case had the manufacturers of electrical apparatus been able to overcome transportation difficulties and shortage of raw material and semi-finished components entering into the production of electrical goods," said Ainslie A. Gray of Chicago, at the afternoon session. He stated that great commercial developments had been made, however, from both the technical and commercial viewpoints.

Present at the convention were some of the oldest electrical men in the business. Edward Kunkel and Nels Butterworth of Davenport have the distinction of being two of the veterans of the association, Mr. Kunkel having been active in the organization of the state electrical men 19 years ago.

Convention at Philadelphia

Pennsylvania State Association Gets Together for Annual Meeting With Fine Program

On January 26 and 27 at the Adelphia Hotel, Philadelphia, the Pennsylvania State Association of Electrical Contractors and Dealers held its third annual convention, which was a great success from start to finish.

An executive committee meeting was held on the morning of the first day, and at noon there was a "howdy" luncheon at which everybody got acquainted.

At this luncheon the fact that less than six-tenths of one percent of Philadelphia's fire loss last year was caused by electrical appliances was brought out by Washington Devereux, chief of

the electrical department of the Philadelphia Fire Underwriters' Association.

"Contractors and dealers in Philadelphia have admirably coöperated with the underwriters, and to this fact greatly can be attributed the small fire loss due to electrical devices. Of the \$8,500,000 loss suffered in this city only \$49,000 was laid to fires from electrical causes. In this respect Philadelphia stands better than any other city in the country," Mr. Devereux said.

He emphasized the importance of the electrical conference established by the underwriters for the instruction of all mechanics in the safety and electrical codes under which they work, improvement in conditions being shown within three months after these became effective. He urged that electrical contractors do all in their power for the conservation of life and property, recent changes in the safety code being intended to insure this without imposing hardships on the trade.

F. R. Smith, chairman of the state association, and J. F. Buchanan, national executive committeeman, were other speakers. The members were welcomed to the city by Robert Grier, W. T. Brown, Jr., chairman of the Philadelphia district association, introduced the speakers.

George Maertz, of the Westinghouse Electric and Manufacturing Co., at the business session following, urged that dealers do more advertising, calling the electrical business "the unadvertised trade." "Out of the \$1,000,000,000 spent on advertising last year \$800,000,000 went for newspaper publicity," he said. "The public mind is fickle, it remembers you only as long as it can see you. To keep ourselves before the public we must advertise and then do it again."

Exemption of electrical appliances from levy or sale on distress for rent was urged in a resolution adopted by the convention.

Those taking part in open discussion on business problems were Albert Gentel and H. G. Kepler, of Philadelphia; J. S. Mosser, of Harrisburg; R. W. Keck, of Allentown, and G. T. Barrows, chairman of the Pittsburgh district association.

The banquet at night on the Adelphia roof was one of the most largely attended in the history of the association. M. E. Arnold, of Philadelphia was toastmaster.

George W. Cartwright, of California, spoke on the lessons to be learned from

panics of the past. A demonstration of the automatic telephone was given by W. S. Vivian, of the Automatic Electric Co. R. L. Cunningham, of Craven & Hopkins, spoke on amusing experiences as a salesman.

At the second day's session there were several interesting addresses, the one by Gilbert S. Smith of J. F. Buchanan & Company, Philadelphia electrical merchants, being printed on another page of this issue.

Chas. E. Tull was chairman of the district convention committee and due to a well laid out program there was something doing all of the time, including an inspection of the Chester Power Plant of the Philadelphia Electric Company.

State officers were elected as follows: R. W. Keck, Allentown, chairman; Geo. T. Barrows, Pittsburgh, vice chairman. Executive Committee: R. W. Keck, Allentown; Geo. T. Barrows, Pittsburgh; Joseph G. Crosby, Philadelphia.

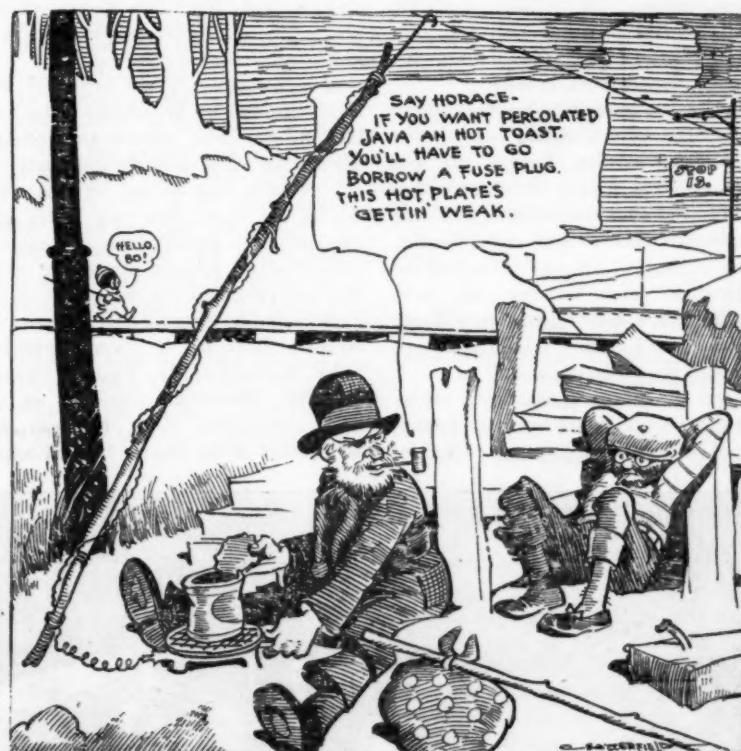
"The next semi-annual meeting will probably be held somewhere in the Northwestern part of the state in July, 1921, on or about a date immediately prior to the National Convention, and

will probably be adjourned for additional sessions at Buffalo, not in conflict with the general program of events of the National Convention," writes M. A. Sellers, secretary-treasurer of the organization.

U. S. Chamber Annual Meeting

Joseph H. Defrees, president of the Chamber of Commerce of the United States, has announced that the ninth annual meeting of the National Chamber will be held at Atlantic City on April 27, 28 and 29.

In announcing the time and place of the annual meeting, President Defrees let it be known that consideration had been given to New Orleans and Washington as likely cities in which to hold the meeting. New Orleans was eliminated because of the desire of the Chamber to hold the meeting in a place near Washington. Lack of hotel accommodations and suitable meeting quarters to comfortably seat the three or four thousand business men who will attend the meeting were the reasons for not selecting Washington.



The Electrical Age
We are indebted to Colonel Stearnes of New Orleans for the above cartoon which he clipped from the "Atlanta Journal" on his way up north to attend the National Executive Committee meeting in New York City the last week in January. The "electrical age" is surely a fact when the hobo can hook on to a trolley wire and heat his hand out.

Successful Meetings in Colorado

By WM. A. J. GUSCOTT

Secretary Says Denver and Colorado Springs Enthused by Visit of Special Representative Davis

I am enclosing a photograph of the banquet given in honor of Laurence W. Davis, special representative of the National Association of Electrical Contractors and Dealers, on the evening of January 14, 1921, and will endeavor to give you an account of the meetings held in Colorado to give Mr. Davis an opportunity to show us the way to successful coöperation on the part of the various interests in the electrical trade and in particular on the part of contractors and dealers.

Mr. Davis reached here on the morning of January 13, and accompanied by myself and J. W. Hancock, chairman of the entertainment committee, spent the balance of the day and the next in calling upon numerous contractors, jobbers, the representatives of the electrical manufacturers, and the officials of the Denver Gas & Electric Co., to enlist their coöperation in making our meetings a success, and it was due to the efforts of Mr. Davis in that direction that we succeeded in having the splendid meetings that resulted.

Mr. Davis attended the meeting of the local electrical contractors' association on Thursday evening, January 13, and spoke at great length on matters that were of vital importance to us from the viewpoint of contractors in particular, and as a result of his arguments and the information given by him the local association decided to adopt an entirely different policy in their relations to each other and the trade in general.

It was the means of starting a movement that will no doubt cause the formation of a local organization wherein,

jobbers, manufacturers, central station, dealers and contractors will all take an active interest, either as active or associate members, and from all appearances we are in good prospect of perfecting a good organization conducted along the proper lines, with a full measure of coöperation on the part of all concerned.

The banquet held at the Metropole Hotel, on the evening of January 14, was attended by 67 men representing all the various branches of the electrical industry that should be interested in coöperating with the contractor-dealer, and after partaking of the sumptuous repast and entertainment provided by the committee, Mr. Hancock, chairman of the committee, introduced J. Fischer, president of the State Association, who by the way is one of Colorado's original members of the National Association, and to whose efforts in a large way in spreading the gospel of National coöperation along electrical lines is due the fact that a few of us were members before this present campaign was started.

Mr. Fischer introduced Mr. Davis as the one who would "Show us the way" and it was the unanimous opinion among those present, after Mr. Davis finished his address, that he did.

It is certainly to the credit of Mr. Davis through his knowledge of his subject and the clear, concise and convincing manner of presenting and analyzing our problem that no one left the room during his more than two hours' discussion. The attentiveness and interest shown by all present proved to us all that our problems can be solved, if the right methods are used and we have the means at hand as Mr. Davis explained.

Mr. Cornell of the Western Electric Co., Mr. Headrick, president of the local association, T. O. Kennedy and Mr. Gentry of the Denver Gas & Electric

Light Co., were asked by the chairman to make a few remarks, and they all expressed the idea that by applying the lesson as taught by Mr. Davis that the proper coöperation could be brought about.

I must say at this time that the contractors and dealers are very thankful for the splendid coöperation and assistance we are receiving from the manufacturers, jobbers and the Denver Gas & Electric Light Co., and particularly on the part of the following gentlemen who are the managers and officials of the following concerns:

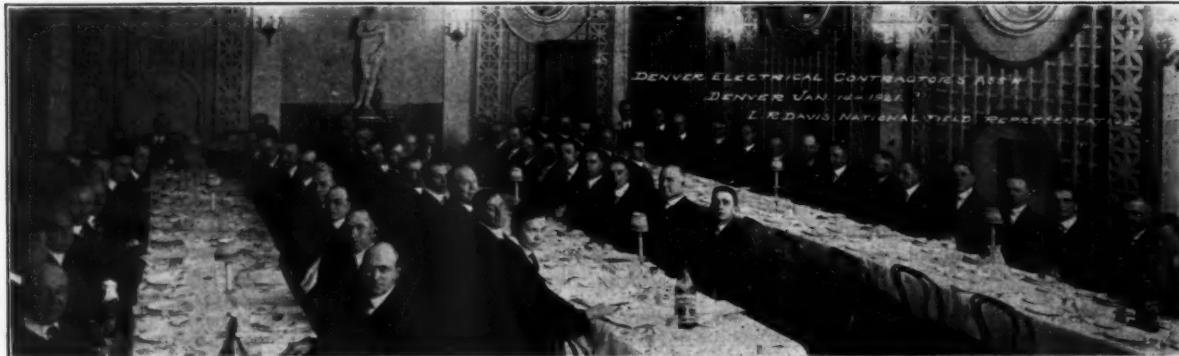
Messrs. Cornell of the Western Electric Co.; Randall of the General Electric Co.; Cargo of the Westinghouse Electric Co.; Ryle of the Mine & Smelter Supply Co.; Davidson of the Hendrie & Bolhoff Mfg. and Supply Co.; Cooper of the Mountain Electric Co.; Lawrence of the New England Electric Co.; Watts of the B. C. Watts & Co.; Poindexter of the Poindexter Supply Co.; T. O. Kennedy, Mr. C. Stannard, Mr. Gentry and Mr. C. Keeler of the Denver Gas & Electric Light Co.

In addition to the individual help of the above we had the coöperation and assistance of their many representatives to carry through the city of Denver and the State of Colorado the message that Mr. Davis was coming to offer us help to solve our problem and to efforts in that direction we can attribute our success in holding the two wonderful meetings we had in Colorado.

Meeting at The Springs

The meeting in Colorado Springs was held in the afternoon of January 17, and through the courtesy of the Lodge of Elks we were given the privilege of holding the same in their beautiful club building.

Here too we had the same splendid coöperation on the part of the manufacturers, jobbers and central stations.



Denver Association Gives Dinner to Special Representative Davis

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The meeting here was arranged by Matt Whitney of the Whitney Electric Co. with the assistance of Frank Dostal, manager, and F. J. Bolger, representative of the Colorado Light, Heat & Power Co. A number of the jobbers' representatives and contractor-dealers were present from Denver to help in



Reading from Left to Right: J. W. Hancock, Chairman of the Denver Entertainment Committee and the Rest of the Committee

Putting Colorado Springs in line from the viewpoint of state organization.

After partaking of the luncheon and hospitality provided by the local committee and the Elks we had a business session and Mr. Davis gave us a very interesting and convincing talk along the lines of coöperation which was received with the same attention and consideration as at the previous meeting held in Denver. All those present agreed to work along coöperative lines and agreed they were much benefited by the information and suggestions given by Mr. Davis.

At this meeting we were honored by having present W. Harry Edwards, a prominent Denver architect, who was very much impressed by the manner in which the contractor-dealers' problems were being solved, and who expressed the idea that in a manner the same cure could be applied to some of the problems the architects have to contend with.



At the Mile High City, State Chairman Wm. A. J. Guscott, Local Chairman E. C. Headrick, Special Representative "Larry" Davis and State Chairman "Jake" Fischer Motored Out to Denver's Lookout, "Inspiration Point," and gave the Rocky Mountains the "Once Over."

As a result of this meeting every electrical contractor-dealer in Colorado Springs signified his intention of joining the National Association; also F. Dostal, manager of the Colorado Springs Light, Heat & Power Co., who became an associate member.

There is every prospect of the boys in the Springs being in a fair way to settle their Local differences and working out their problems in a manner that will be beneficial to all concerned.

We certainly had two wonderful meetings. There was more real good accomplished to place the business on a firm and stable basis during Mr. Davis' visit than has been done here for a long time previously, and as State Secretary, on behalf of the electrical contractor-dealers, I want to express to you and the officers of the National Association of Electrical Contractors and Dealers, our thanks for the happy thought that decided you to send Laurence W. Davis out to the Wild and Wooly West, to spread the gospel of true coöperation on the part of contractor-dealers and other interests in the electrical business. We are all convinced that we shall receive in value many times over in improved trade conditions the small financial cost of being a member of the National Association.

As a result of the two meetings our membership in the State numbers thirty-one, with the prospect that in the very near future we shall add quite a number of new ones as the seeds that Mr. Davis sowed are bound to grow.

We expect some time next month to hold a meeting in Pueblo to add to our membership in the southern part of the state.

All of us have hope that at some time in the near future, Mr. Davis will again visit us and help us to pick up the stray ones that we have not corralled by that time.

Get Together Meeting in Boston

By J. E. WILSON

Secretary of Local and State Associations of E. C. D. Reports Interesting Program

About 600 men, interested in the various branches of the electrical industry, assembled in the Auditorium of the Boston City Club on Wednesday, January 26, to listen to plans for a general get together of the four branches of the industry.

Bowen Tufts of the C. D. Parker Co.,

also president of the New England branch of the N. E. L. A., presided, and was ably assisted by members of the Council of Electrical Associations of New England.

Henry C. Atwell, chairman of the Public Utilities of Massachusetts, gave a very interesting talk, and he was followed by the Coöperation Council of the City of Boston, and C. S. Beardsley, William L. Goodwin, Reverend Perry Bush, and Martin J. Insull, President of the N. E. L. A.

Guy W. Cox, brother of the Governor of Massachusetts was the toastmaster.

During the dinner there was community singing and vaudeville stunts, which kept the audience in good humor.

At eight o'clock the meeting opened with an introductory talk by Bowen Tufts, and was continued by the above mentioned speakers until a late hour. It was unfortunate that the program was so long, as people living in the suburbs were obliged to leave early to take the last train home.

It is hoped that great benefits to the industry will result from this meeting. Committees have been appointed in the different branches, and the personnel of the committees are such as would indicate that strenuous work will be done in 1921, to bring about and make good the slogan, which was adopted at the meeting, of "25% Increase in Business in 1921."

Already active steps are being taken in that direction, and several committee meetings have been called with this idea in view.

Wisconsin State Meeting

Two Day Session at Milwaukee Was a Largely Attended and Interesting Affair

The Annual Convention of the Wisconsin State Association of Electrical Contractors and Dealers was held in Milwaukee, at the Republican Hotel, January 19th and 20th. The convention was attended by 180 people and one of the most interesting and instructive programs ever had by the association was presented.

P. C. Burrill, of Milwaukee, presented a paper on "Financing a Contractor-Dealer's Business." This paper is printed in this issue. Geo. B. Muldaur of the Underwriters' Laboratories, Chicago, presented a paper on the subject of "Who's Who on Electrical Rules."

John Stanton of the Westinghouse

Electrical & Manufacturing Company, read a paper on "Merchandising Electrical Appliances." J. P. Pulliam, vice president of the Wisconsin Public Service Company presented a paper on the "Ideal Coöperation between the Central Station and Contractor-Dealer." A. A. Gray of Chicago gave us a talk on the "Past Years Developments and the Outlook for the Future."

E. E. Garlits of the Westinghouse Electrical & Manufacturing Company, New York City, presented a paper on the "Contractor-Dealer of Tomorrow." A. Penn Denton of Kansas City, Missouri, very ably represented our National Association.

On Wednesday evening a Blue Glass Theatre Party was held and on Thursday evening our annual banquet and dance was held, which was attended by 180 guests.

The lady visitors of the association were entertained by our association on a visit to the Auto Show on Wednesday afternoon. On Thursday they were entertained at lunch at the Athletic Club and to a matinee in the afternoon.

The following officers were elected for the ensuing year: Chairman, B. L. Burdick, Milwaukee; Secretary, H. M. Northrup, Milwaukee; Treasurer, J. L. Acker, Sheboygan.

State Executive Committee: B. L. Burdick, Milwaukee, Chairman; W. F. Meter, Oshkosh, J. L. Acker, Sheboygan, L. G. Ross, Superior, Hans Larsen, Racine, O. L. Uihlein, Milwaukee, J. J. Kelly, Eau Claire, George Spiegel, Clintonville, L. W. Burch, Madison.

H. M. Northrup, Secretary.

Electrical Men Organize

M. W. Birkett of Power Company is Head of New Spokane Service League

Forty men connected with various phases of the electrical industry, either as contractors, dealers, jobbers, manufacturers or central station men, have organized the Spokane Electrical Service League.

The objects of the league are to "promote the growth of the electrical industry in all of its branches, the coördination of effort in rendering better electrical service to the public, advancement along constructive lines within the industry in the way of encouraging sound ethical and progressive business methods by which a fair and reasonable return will be received on service rendered the public and to encourage the

greater use of electricity and electrical equipment.

Membership will be confined to individuals and not the concerns engaged in the industry. The first meeting was held last Friday. Subsequent meetings are to be called from time to time by the executive committee.

Officers elected were: Chairman, M. W. Birkett, Washington Water Power Company; Secretary-treasurer, D. W. Henderson of the Austin-Henderson Company.

Executive committee: The president and secretary-treasurer and C. A. Marten, manager of the Western Electric Company; C. V. Aspinwall, sales agent for the Westinghouse Electric and Manufacturing Company, and H. D. Alton, Electric Service Company.

Meeting at Salt Lake

Representative from National Headquarters Received With Enthusiasm

Laurence W. Davis, special representative of the National Association of Electrical Contractors & Dealers was the principal speaker at a meeting of the local association at Salt Lake City, Utah., on the evening of January 19. In addition to the members of the Salt Lake organization, a number of others interested in the electrical industry were present.

Mr. Davis told what other sections of the association in various parts of the country are accomplishing by keeping in closer touch with the national body.

He outlined proper merchandising methods, and showed how satisfactory profits could be made when the proper methods of handling the business in general were followed.

That the welfare of the contractor-dealer, and in fact everybody in the industry, depends upon the success and progress of the central station, was clearly pointed out by Mr. Davis, and he urged that a spirit of coöperation and good fellowship among all branches of the industry should prevail for the mutual benefit of all concerned.

He particularly emphasized the necessity of everybody in the industry giving their hearty support to the coöperative movement which has just been launched in Salt Lake through the organization of the Rocky Mountain Electrical Coöperative League, and in this connection pointed out that the convenience outlet campaign should be one of the most important activities of the League. The benefits of the convenience outlet, to the

public and to the electrical industry, were clearly set forth, and the speaker declared that the success of the idea depends to a considerable extent on its being properly presented and explained to the public.

Mr. Davis made a very comprehensive analysis of items of overhead in carrying on the business of a contractor-dealer, and pointed out the advantages of making a close study of this phase of the game.

Proper buying, a careful, vigorous collection system, and a good accounting system he declared were very essential for the success of the contractor-dealer in business.

Mr. Davis aroused considerable enthusiasm and interest by his clear analysis of each subject, and it was the unanimous opinion of those present that his address was of considerable educational value to all concerned.

Before the close of the meeting several individual members of the local Contractor-Dealers' Association made application for membership in the National Association.

Mr. Davis' Long Trip

Covers Principal Western and Coast Cities With Return via Southern Route

Special Representative Laurence W. Davis is covering a vast territory on his winter trip. From New York to the Pacific Coast, thence South through to Florida, and then back to New York makes about nine thousand miles.

Laurence W. Davis, Special Representative of the National Association of Electrical Contractors and Dealers, who is on a nine thousand mile trip covering a large part of the country, has held meetings in Omaha, Lincoln, Denver, Colorado Springs, Butte, and Spokane, during the two weeks from January 10th to the 24th, and has found an enthusiastic interest in coöperative work in each place.

At Omaha Mr. Davis addressed the Electrical Industries Club at noon on January 11, and that same evening about forty men turned out at the Omaha Electrical Contractors Dealers' Association meeting, to hear his message. Omaha is making splendid strides in constructive coöperative work, and following this meeting many contractors present decided to adopt the National Association accounting systems in their business.

Three meetings were held in Colorado, two of them in Denver, on January 13 and 14 and one in Colorado

Springs, on the afternoon of the 17th, an account of them appears on another page of this issue.

Salt Lake City which has a fine local association, gave Mr. Davis a splendid turnout of all electrical interests, on the evening of the 19th, and as a result their local membership joined the National Association and determined to extend the movement throughout their state by a series of meetings in other cities. An account of this meeting is printed on another page.

The Montana State Association which was formed last year, but had not affiliated with the National, made their meeting at Butte on January 22, an opportunity to get acquainted with the National Association's work, and agreed to unite their whole state membership with it. A big State Convention is planned for April 14 to 16, at Butte, with a roundup of all Montana electrical interests, and at the same time both the General Electric and Westinghouse "Traveling Circuses" will be at Butte, with a splendid educational program.

The Butte, Montana men are also interested in the efforts of the Idaho contractors and dealers, to form a state organization, who will hold their first convention at Twin Falls, Idaho, on February 20.

About fifty men turned out to hear Mr. Davis at the Spokane meeting, and he urged the organization of a much needed local association of contractors and dealers, to function in coöperation with the Northwestern Service League's coöperative movement.

Seattle, Wash., was visited on January 28, where an evening meeting was held and an enthusiastic welcome accorded Mr. Davis. From there he went to Vancouver, British Columbia, an account of which appears in the writeup of Canadian activities on another page of this issue. Then he returned to Seattle for a conference before keeping his next engagement.

After holding interesting meetings in Tacoma, Wash., and Portland, Oregon, Mr. Davis went on to California, where meetings were held at San Francisco, Fresno, and Los Angeles, reports of which are too late for publication in this issue.

Mr. Davis' talks, which cover the practical everyday problems of the contractor-dealer, are accompanied with blackboard illustrations on overhead, percentages, turnover, etc., and outline the constructive educational work which local associations can do under the new

ideal of bettering competition, rather than restricting it. Over fifty new members were added to the National Association during the first two weeks of his trip, and further meetings are arranged for a return trip via Arizona, Texas, Louisiana, Alabama, Florida, and the Atlantic States.

National Executive Committee

Regular Meeting at Headquarters in January Was Well Attended

The midwinter meeting of the Executive Committee of the National Association of Electrical Contractors and Dealers is held so late in the month of January that a report of it cannot be published in the February number without holding the forms of that issue until after the adjournment of the meeting, which would cause a week's delay in publication.

The meeting was held on January 24 and 25 at National Headquarters in New York City, all members being present except J. A. Fowler of Memphis, C. H. E. Williams of Vancouver, Hugh Kimball of Oakland, California, and J. R. Tomlinson of Portland, Oregon.

At the first session, held on Monday, January 24, after the usual roll call and the reading of the minutes of the previous meeting, which were approved, Chairman W. Creighton Peet appointed the following nominating committee: G. M. Sanborn, Indianapolis, chairman; Paul H. Jaehnig, Newark, N. J., and K. A. McIntyre of Toronto.

In presenting his report as National Chairman, Mr. Peet congratulated the various committee chairmen on their work in relieving him of a large amount of detail in the conduct of his office, and also thanked the secretary and general manager for his able assistance along these lines. He urged the members to continue their coöperation with other branches of the electrical industry, and spoke optimistically of the future of the merchant-contractor.

W. H. Morton, secretary-treasurer, then submitted his report which showed a satisfactory financial condition for the association and this was attested by the official auditor. In making special mention of the work of Special Representative Laurence W. Davis, Mr. Morton said:

"The work of our special representative is being carried on along the same general lines and does not seem to have

been seriously affected by the existing business conditions.

"Between the last meeting and the end of 1920 he visited a number of cities in Pennsylvania, Indiana, Michigan, Wisconsin, and Minnesota and in addition to the work done in connection with local problems, he secured 83 new members.

"On January 9 Mr. Davis started on a trip through the western and southern section of the country involving approximately 9000 miles travel, and covering 16 states with meetings in 24 cities.

"After the completion of this trip he will revisit some of the territory already covered, giving him an opportunity of closing up some of the work previously started.

"His work has been satisfactory in every particular and during the eleven months of his employment he has secured 255 new members, 222 subscriptions to the ELECTRICAL CONTRACTOR-DEALER Magazine, 6 orders for Standard Cost Accounting, in addition to bringing the National office into personal contact with the membership."

Mr. Morton's report on membership showed that from December 31, 1919, to December 31, 1920, there had been an increase of more than 25 percent in membership, with a total of almost 2200 on December 31, 1920.

The chairman of the Central Station Committee, A. J. Hixon of Boston, in offering his report urged the members to overlook no opportunity in coöperating with the N. E. L. A., as he believed the two organizations would be of great help to each other. Following this report G. M. Sanborn offered the following resolution which was unanimously adopted:

"Whereas, The Executive Committee of the National Association of Electrical Contractors and Dealers recognized the present need of public utilities in general and central stations in particular in furthering their sale of securities to the public, be it hereby

"Resolved, That this committee shall offer its moral and active support in promoting the feeling of good will toward said central station interests, and urge the membership of the organization which it represents to do all in its power toward that end."

Reports were then submitted and approved on the anniversary convention at Buffalo next July, The Housewiring Committee, the U. S. Chamber of Commerce by Robley S. Stearnes of New

Orleans, and the Committee on Liability Insurance, J. A. Fowler of Memphis, Chairman.

A. Penn Denton of Kansas City, chairman of the Code Committee, stated in his report that an important question which should be considered is the proposition to consolidate the National Electrical Code and the National Safety Code. This led to considerable discussion, the majority of those present declaring themselves against such consolidation.

Mr. Denton also reported that the preliminary work of the Electrical Committee of the National Fire Protection Association, Dana Pierce, chairman, has not as yet gotten under way preparatory to a study of the National Electrical Code, looking forward to the 1922 revision. Up to this time Mr. Pierce has suggested to the committee only one technical sub-committee and that to consider the subject of "Conduit Laid in Cinders." He wrote that during the past year, he had received quite a number of complaints on this subject and thought it important enough to have it investigated.

K. A. McIntyre of Toronto, reported that the Cost Data Committee had been doing considerable preliminary work since the Baltimore convention, but that funds would be required to proceed further. After some discussion a sum of not to exceed \$1,000 was voted for this purpose.

Acting on a communication from the District of Columbia association it was moved, seconded and carried, that the Executive Committee unanimously recommend to the National Association that John R. Galloway of Washington, D. C., be made an Honorary Member of the National Association of Electrical Contractors and Dealers and that this recommendation be acted on at the next regular meeting of the Association.

Mr. Galloway was National President from 1914 to 1916, and has a host of friends in the electrical industry who will be pleased to learn of this honor conferred upon him by his association.

The Secretary presented to the meeting correspondence from the California State Association in reference to certain conditions in regard to bidding on government work and was instructed to advise the California Association that it was not advisable for the National Association to take this matter up unless requested to by the Government, but that a further investigation of the matter would be made.

A communication from the lamp manufacturers requesting the endorsement of their efforts to standardize three voltages was also acted upon and approved by resolution.

In reviewing the work of the National Labor Council, the special labor committee of which he is the chairman, L. K. Comstock of New York City stated that the building industry, which includes electrical contracting, suffers from paralysis and that the downward tendency of prices argues for a reduction in wages. Such a condition has brought no end of strife between employer and employee. Continuing he said:

"Your committee does not assume to sit in judgment on the justice of or the justification for the charges and counter charges made. It merely records these facts with which all are familiar, in order to emphasize the gravity injected into the present situation by the reaction of the workers everywhere to the arbitrary attitude of employers.

"Undoubtedly there is abundant cause for grievance and resentment on the parts of both employers and employees, but the Committee is fully satisfied that fighting will aggravate rather than cure the conditions. After all, the indisputable fact remains that employers and wage earners have to live and work together in their industrial house and they must, therefore, find a means of so living and working in peace and harmony in order that both may benefit by increased production obtainable only through team work, or else they will ultimately pull the whole structure down about their ears."

Mr. Comstock cited a number of examples of complaints that had been settled by his committee and others that were pending, all of which he believes will be satisfactorily adjusted. An appropriation of \$1,500 was voted to this special committee to meet the association's share of the Council's expense.

G. M. Sanborn reported for the Standard Symbols Committee. He said that considerable progress had been made and that the final development is now in the hands of the National Engineering Standards Committee.

The report of the Nominating Committee was presented in these pages last month and the official list of National officers and committee chairmen is printed on a special page in the first advertising section of this issue.

On both days of the meeting the com-

mittee and guests lunched at the Engineer's Club where discussions of trade interests were taken up. On Monday night the committee attended the Hippodrome, Secretary Morton having reserved a sufficient number of front row boxes to accommodate the visitors.

A complete report of the proceeding of this meeting of the National Executive Committee is now in the hands of the printer and this will be mailed to all members as soon as it is published.

Electrical Supply Jobbers' Meetings

The quarterly meeting of the Atlantic Division, Electrical Supply Jobbers' Association, will be held at the Commodore Hotel, New York City, March 15. The Central Division will meet at the Congress Hotel in Chicago on the same day. The executive committee of the association will convene in Cleveland March 16-17, and at Hot Springs, Va., May 23-24, the general meeting of the organization having been arranged for May 25-27 at the latter place.

As all of these except the executive committee meetings are public, contractor-dealers should make an effort to attend.

Fixture Market

The Second Annual Fixture Market was held in Buffalo, N. Y., during the week of February 14 and was a huge success.

Under the direction of the Lighting Council, the organizations of manufacturers, dealers, and glassware men joined in bringing together more than two thousand visitors at Buffalo.

Convention sessions were held by each of the organizations during the morning hours and they then met together for luncheon at which prominent speakers addressed them on topics relating to the fixture trade.

On Wednesday, Fred R. Farmer, president of the Beardslee Chandelier Manufacturing Company, Chicago, and also president of the fixture manufacturers' group, took part in the program of the dealers' meetings. At the luncheon session of the same day, C. J. Netting, Detroit, president of the Dealers' Society, introduced Wm. L. Goodwin as the principal speaker, who as usual held the attention of the large audience in a most interesting address.

A daily paper was published by the combined interests during the week of the convention and was distributed at

the hotels and at Elmwood Music Hall, where the Fixture Market was held. There were more than a hundred exhibitions at the show, and home and industrial lighting demonstrations were given daily during the week.

Great credit is due to Chas. H. Hofrichter, secretary of the manufacturers' association, and J. L. Wolf, secretary of the Lighting Fixture Dealers' Society of America, for the overwhelming success of the event.

News from the Orient

Former Prominent Member of National Association Writes Interestingly of Japan

A letter has been received at National Headquarters from Solomon Davis, No. 42 Yamashita-cho, Yokohama, Japan, which address he states is the "Oriental office of the ELECTRICAL CONTRACTOR-DEALER magazine."

Mr. Davis, who formerly was a New York electrical contractor, has been making his home in Japan for the past few years, having returned there after several months' visit in New York City last summer. He writes in part as follows:

"Financial conditions here somewhat resemble those in the U. S. A. at this writing; many staples have taken a great recession at wholesale but when you go to buy at retail they are as high or higher than a year ago. There is one notable exception, in America the only people who can afford silk garments are millionaires and workingmen. Here nearly everybody does, even the worms.

"So far the economic stringency in Japan has involved the speculative interests, which included most of the staple productions of the country, for here there are no 'anti-trust laws'; on the contrary the government rather encourage combinations of producers, seemingly forgetting the hardships of the consumer. This particularly applies to the agrarian interests, who seem to be particularly favored by the present party in power.

"When I left Japan in April, 1920, rice was selling on the exchanges for Yen 52 per 'koku' (slightly less than five bushels). Now as you will see from the enclosed cutting from the Japan Advertiser of this date, it is about Yen 23. Yet my servant tells me, only this week when she made a purchase at retail it was Yen 37. Remember, this is the staff of life of the people and I am of the opinion that a retailer in the U. S. A.

who charged a profit like this on say, wheat flour, would decorate a lamp post."

Electric Vehicle Show

The Electric Automobile Show which ended on February 12th at the Show Rooms of The New York Edison Company proved a highly successful venture in automobile selling and many contracts were closed during the two weeks. Indeed, encouraged by its success, Edison officials announced that the show would become a regular fixture in their program of electrical demonstrations. There was never a time during the show that the exhibits were without interested inquirers, and actual sales are reported by several of the exhibitors. Two meetings, at which well known speakers addressed the electric vehicle men, were features of the show period.

Goodwin Plan Pamphlets

The Goodwin Plan is the title of a pamphlet prepared by Samuel Adams Chase, who has shared honors with Wm. L. Goodwin during the past few years.

Mr. Chase announces that he will be glad to send copies of this little pamphlet to any that may be interested. Requests should be addressed to Mr. Chase in care of the Westinghouse Electric & Manufacturing Company, 165 Broadway, New York City.

New Honors for Colonel Stearnes

Word has been received that Col. Robley S. Stearnes, past president of the National Association of Electrical Contractors and Dealers and a member of the executive committee, has been elected president of the Contractors' and Dealers' Exchange, a local organization of New Orleans, his home city.

Col. Stearnes is president of the Standard Electric Construction Company, Inc., electrical engineers and contractors, 336 Camp Street, New Orleans.

New Officers in New Jersey

At a meeting of the New Jersey Association of Electrical Contractors and Dealers held at Trenton on January 29, George E. Davis of Newark was elected chairman, and Elmer Wilson of Newark was elected secretary. Mr. Davis was the former secretary of the state association, and Charles R. Newman of Passaic was chairman.

N. E. L. A. Utility Advertising

National Campaign Well Under Way and All Interests Are Helping

The National Electric Light Association has announced definite plans regarding the development of the co-operative advertising campaign in which manufacturers of electrical machinery, equipment and supplies are participating.

In the first place, the Association's own advertising campaign started February 19, with a half page advertisement in the Saturday Evening Post. Twelve similar advertisements will appear in subsequent issues of the Saturday Evening Post at intervals throughout the year.

The first of the manufacturers' advertising in popular magazines appeared January 29 in Collier's Weekly. During March other good will advertisements, written about the central stations' problem, will appear in such magazines as Literary Digest, Collier's Weekly, Saturday Evening Post, and the American Magazine, over the individual firm name of the company donating the space as follows:

General Electric Company, Schenectady, New York; Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.; Wagner Electric Manufacturing Company, Philadelphia, Pa.; Western Electric Company, Inc., New York City; Mazda Research Laboratories, Cleveland, Ohio.

The foregoing are definite commitments, dates and space to be utilized having been scheduled.

The Robbins & Myers Company will publish quarter page advertisements in the following newspapers during the month of March, these advertisements also being in behalf of the central stations: Chicago Tribune, Detroit Free Press, St. Louis Globe Democrat, New York Times, Cleveland Plain Dealer, Philadelphia Public Ledger, Boston Herald, Fresno California Republican, Santa Rosa Mercury Herald, Sacramento Bee, Boston Traveller, Cincinnati Enquirer.

The following companies also have agreed to use space in national popular magazines:

Hoover Suction Sweeper Company, New York City; Edison Electric Appliance Company, Inc., New York City; Harbirshaw Electric Cable Company, New York City; The Duplexalite Company, New York City; The Hurley Machine Company, Chicago.

Among more than twenty-five other companies that have agreed to use space in the trade papers are the following: Trumbull Electric Manufacturing Company, Plainville, Conn.; Hygrade Lamp Company, Salem, Mass.; Condit Electrical Manufacturing Company, South Boston, Mass.; Westinghouse Lamp Company, New York City; The P. A. Geier Company, Cleveland, Ohio.

Member companies will be advised from week to week regarding advertisements to appear during the subsequent ten days or two weeks, in order that, wherever possible, they may utilize the advertisements by reproducing them in their local newspapers.

Following are excerpts from a Western Electric advertisement recently printed in several of the popular magazines:

"Electricity is one of the few essentials which have shown little increase in price during the years when everything else went up. But it kept costing more to make it and deliver it to your home or office.

"Small wonder then that service has suffered, and people who need electric light and power cannot get it. Then obviously to raise the rates would be the most sensible course for all concerned—for the electric light people and in the long run for the public too.

"With the added income and capital flowing in, the company could build up an adequate plant to handle the ever growing demands placed upon it, this year and next year and ten years from now."

Some of these advertisements are particularly adapted to being clipped and reproduced in local newspapers as paid advertisements. Wherever possible, the central station is urged to do its part in increasing the efficacy of this advertising by giving it as wide a distribution as possible.

Standardization Wires and Cables

A conference on the standardization of insulated wires and cables was held in New York, February 2. The conference, which was called by the American Engineering Standards Committee at the instance of the American Railway Engineering Association, was attended by representatives of fourteen national organizations. W. Creighton Peet represented the N. A. E. C. D.

After a thorough discussion of the many considerations involved, it was unanimously decided that "The unification of specifications for wires and

cables for other than telephone and telegraph use should be undertaken under one general plan, covering substantially all the more important uses."

N. E. L. A. Convention

The annual convention of the National Electric Light Association will be held in Chicago this year, from May 31 to June 4, at the new Drake Hotel. The forty-third convention of this association was held in California last year.

Passing of Mrs. M. W. Hansen

Blanche Georgian Poe Hansen who was born October 3, 1879, at Toledo, Ohio, and was married to Marvin Wade Hansen, November 18, 1897, at Toledo, Ohio, was actively engaged in the elec-



trical business with her husband for twenty years. She was identified with the social and business life of Toledo, where her sunny disposition made her a great favorite.

Mrs. Hansen passed out of this life February 5, 1921, after fifteen weeks' illness at St. Vincent's Hospital, following a minor operation on her tonsils. Her funeral was held on February 8, and was attended by representatives of all the electrical and building interests of Toledo.

She leaves her husband and mother, Mrs. J. M. Poe, of Toledo, and a sister, Mrs. Zoe Williams of Evanston, Illinois. The photograph from which the accompanying illustration was made was taken in September, 1920, a few weeks before she went to the hospital. The body was laid to rest in Woodlawn Cemetery, Toledo, Ohio.

Mr. Hansen has the sincere sympathy of a host of friends in this, his great bereavement, which words of comfort can but feebly express.

Cost Accountants Year Book

The 1920 Year Book of the National Association of Cost Accountants which has just been published is an attractive volume which ought to prove of real value to all men interested in cost work. In addition to the reports of the various officers and committees and a list of the members, it contains a complete report of all papers delivered at the annual convention at Atlantic City, together with the discussions which followed each of these papers. This section contains a fund of practical cost information of a type which does not as a rule find its way into print.

The Year Book is distributed to all members of the Association. We are informed by the Secretary that there are a few copies available for general distribution to men interested in cost questions. The offices of the association are in Rooms 2546-2548 Woolworth Building, 233 Broadway, New York City.

Safety First

Safety first activities, restricted to a larger extent by important war obligations in the last few years, have been earnestly resumed by The United Electric Light & Power Company of New York. A general committee embracing every department of the company has been appointed to meet monthly, hear and consider the reports of subcommittees and devise ways and means of minimizing the so-called unavoidable, careless and all other classes of accident by educating and instructing the company's personnel and by improving and safeguarding equipment that presents an injury hazard.

An interesting innovation intended to arouse the interest of employes in the movement and to make them think has been adopted. This is based on the utilization of the weekly pay envelope to convey a safety message to every employe regularly. The first notice was in the nature of a New Year's greeting from the committee and was followed up by a notice showing the number and percentage of accidents in the various departments of the company, happening during a given period. It was hoped in this way to arouse departmental pride and rivalry. The committee intends to present, pictorially, the results of accidents by this method and bring the consequences of carelessness forcefully to the attention of every employe.

Send to National Headquarters for information on the New Business Record.

March, 1921

News Notes Concerning Electrical Contractor-Dealers

Business Changes, Store Improvements, and New Establishments Opened

A. G. Barber, Frank Yocum & Ellis Lewis, successors to J. Burrell, are going to open a new electric appliance store in Elsinore, California.

John Quick will open a new electric supply store in Manistique, Mich.

Smith Perry Electrical Company, Dallas, Texas, has increased its capital stock from \$60,300 to \$100,000.

It is reported that R. M. Wilder is opening a new electric appliance store in Altamont, Mo.

Edward J. Shimon, in the furniture and jewelry business at Reedsville, Wisconsin, will add a line of electrical appliances.

The Ceremic Electric Company has opened a store in Wellsville, Ohio. Incorporated capital \$25,000. Incorporators: P. W. Emge and others.

Nesbit & Aden Torr have opened a new electric supply store in Bloomfield, Indiana.

C. A. Smith Electric Company has opened a new store at Wellsville, Kansas. Incorporated capital \$100,000. Incorporators: C. A. Smith and others.

Foos & Foos are reported to have opened a new electric appliance store in Watseka, Illinois.

L. C. Bruss will install a line of electric appliances to his drug business at Reedsville, Wisconsin.

W. W. Maertz in the hardware business at Reedsville, Wisconsin, will add a line of electric appliances.

Lucien Great will open a new electric appliance store at Lewiston, Illinois.

Chapman & Brown are going to open a new electric appliance business at Clifton, Illinois.

Howlett Electric Company are going to open a new store in Sheffield, Illinois.

Jack Cavender will open a new electric appliance store at Del Rey, California.

Clyde G. Nason has opened a new electric shop at 213 East Second Street, Thief River Falls, Minnesota.

C. L. Stewart has opened a new electric appliance store at Americus, Kansas.

Home Appliance Company will move to 1606 Nineteenth Street, Bakersfield, California, where a new electric appliance business will be set up.

Ray Ryan Electric Company in the electric appliance business at Pittsburgh, Kansas, will erect a new building and increase stock.

Cleveland Washing Machine Company will open a new store carrying electric appliances at Euclid Avenue & East 6th Street, Cleveland, Ohio.

E. W. Pantz of Reedsville, Wisconsin, will install a line of electric appliances in his hardware business.

Lee Smith is reported to have opened a new electric appliance store in Louisiana, Mo.

Theodore Dietz is opening a new store in which electric appliances will be carried at 301 Lillis Building, Cleveland, Ohio.

Stuart C. Irby & Company have opened a new electric supply store at Jackson, Mississippi. Incorporated capital \$100,000.

The Blue Bird Electric Shop of which M. Andreason & Company are managers, has opened a new electric supply store at 24th & Fort Streets, Omaha, Nebraska.

M. A. Stueland is going to open a new electric appliance business at Watseka, Illinois.

Glasgow Electric Company has opened a new store carrying electric appliances at Glasgow, Kentucky.

Domestic Electric Appliance Company, successors to F. J. Wallace, is opening a new business at 1533 Clay Street, Oakland, California.

C. C. White Electric Company has opened a new electric appliance store at South Bend, Texas.

The Crystal Electric Sales Company will open a new store at Mansfield, Ohio. Incorporated capital \$25,000. Incorporators: W. Spitzer and others.

Robert A. Brumm will open a new electric supply store at Watertown, Wisconsin.

Interstate Appliance Corporation has opened new electric supply store at Portage, Wisconsin.

H. Singer, successor to A. J. Loftus, is opening a new electric supply store at Crawford, Nebraska.

Starkey & Struble formerly in the plumbing business at Forest Lake, Minnesota, will open an electric appliance store.

Robert J. Day is reported to have opened an electric shop at Odon, Indiana.

Marion Electric Company will move from the basement to the first floor of the building located at Corner 7th Avenue & 12th Street, Marion, Iowa.

Floyd & Griffey, successors to S. H. Heustis, have opened a new electric supply business at South Harrison Street, Shelbyville, Indiana.

Twin City Electric & Supply Company is opening a new store at Menash, Wisconsin. Increased capital from \$5,000 to \$15,000.

H. Paull & G. Slavich will open a new electric appliance store at King City, California.

Liberty Electric Company is going to open a new store carrying electric appliances at 10302 Superior Avenue, Cleveland, Ohio.

Interstate Appliance Corporation of Belleville, Illinois, has bought and will continue to conduct the electric appliance department of the St. Clair Country Gas & Electric Company.

Lantz Electric Company will remodel, make alterations and move to their new electric appliance business in the building located at 142 Pine Avenue, Los Angeles, California.

Skillman Electric Company is opening an electric appliance store at 5 West Market Street, Indianapolis, Indiana.

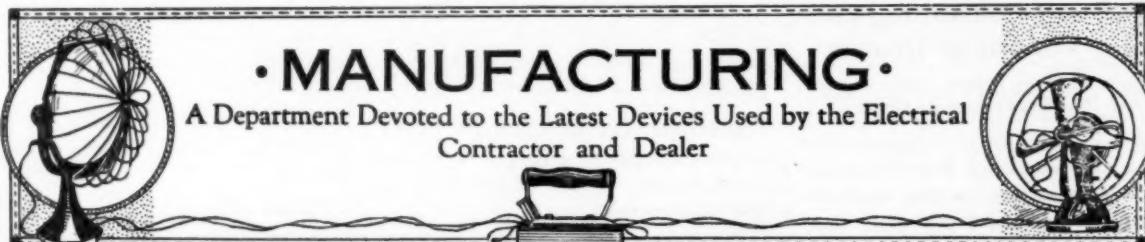
Vernon Electrical Company of which Allen Turner is proprietor, will open an electric appliance business at Plainview, Texas.

A. E. Day Electrical Company will open a new store at 13943 Euclid Avenue.

Electrical Sales Company will open a new electric supply store at 2023 Main Street, Dallas, Texas.

W. R. Wylde is having a new building erected in which electric appliances will be carried at 933 West 54th Street, Los Angeles, California.

Syracuse Electric Store formerly owned by Mishler Bros., has been bought by Roscoe Howard who will continue to conduct this electric supply business.



A New Resistor

The National Electrical Supply Company, Washington, D. C., is manufacturing a new resistor for heating devices, rheostats, instruments, etc., designated as Calore! Ribbon.

It marks a distinct advance in the production of resistances. It is a flexible metal ribbon $\frac{3}{8}$ inches wide, .01 to .025 inches thick. Its resistance is from 200,000 to 300,000 ohms per square mil foot; the .01 Calore! Ribbon having a resistance of 6.43 ohms per inch.

It is produced by automatic machinery, from round wire, and can be made special in copper, nichrome, silver, iron, etc. The resulting ribbon having about 750 times the resistance of an ordinary ribbon of the same material and dimensions.

It is absolutely noninductive and is extremely flexible.

New Bryant Socket

To simplify the installation of sockets in reflectors as well as minimize the labor necessary for connecting circuit conductors thereto, the Bryant Electric Company have brought out a new



medium base reflector socket which is designated by their catalog No. 4235.

This device is a single piece of ruggedly designed porcelain, with four mounting levels or steps of $\frac{1}{4}$ " each, providing opportunity to hold the lamp at four different focuses with reference to the reflector.

As will be noticed in the front view shown, the conductors pass through individual holes to the binding screw terminals which are located in shallow recesses in the front or lamp end of the socket. Terminal binding screws are extra heavy and long, and are staked to prevent being backed out all the way and lost.

No caps are provided with these sockets as it is a simple matter for reflector manufacturers to supply the style of supports best suited to their particular style reflectors or holders.

Another advantage of this style of socket is that the means of supporting socket in reflector can be so arranged as to be accessible from the front or lamp end of socket.

This socket is $2\frac{1}{4}$ " in diameter, 1 9-16" deep, holes for supporting screws are 3-16" diameter, spaced 1 27-32" on centers.

Octagon Type Outlet Box

Meeting the very special needs of reinforced concrete work, the Adapti Company of Cleveland have brought out a new stamped steel octagon outlet box for reinforced concrete construction



offering features of more than usual interest.

The octagon shape is of real value, offering a flat surface for locknut and bushing, making a tighter, better fit than the usual round surface of outlet boxes.

The removable back is held in place by screws. A projecting lip is tapped to take these screws also closing the keyhole slots against leaking concrete.

The box is nailed to the form-through projecting ears which are held in place by cover screws. Instead of trimming the nails after the forms are taken down, as in the usual box, this

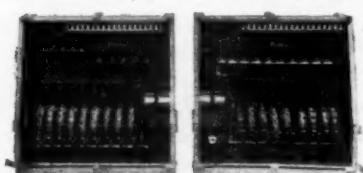
octagonal box leaves both the nails and projecting ears exposed which are easily removed by loosening the cover screws.

When an extra deep box is required two or more boxes can be used to make one deep unit. The box is made two, three and four inches deep. Both sets of lips being tapped on $3\frac{1}{2}$ " centers, makes it a simple matter to assemble these boxes to any required depth to meet any construction need, without the addition of extension rings.

It is made for $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch knockouts in any combination of outlets.

Portable Dimmer Cases

For the use of traveling shows including vaudeville, legitimate, variety and moving pictures, to enable the company to produce the proper lighting effects in the house in which they play without having to depend upon the special electrical equipment in each theater, small compact portable dimmer cases containing all the necessary devices for proper regulation of the



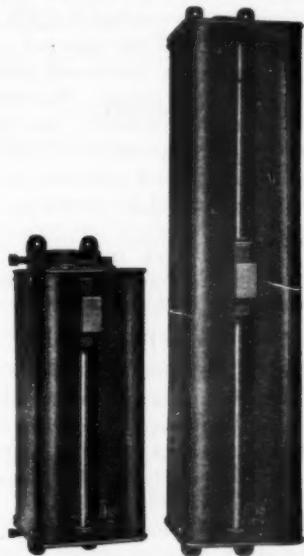
This small dimmer case enables traveling shows to obtain the same lighting effects at each performance independent of the dimmer equipment in the playhouse

various theater lights, are being made by the Display Stage Lighting Company, Inc., 314 W. 44th Street, New York.

These cases are easily carried with other baggage and may be promptly set up wherever the company is playing. Where the case is desired to be extremely light so as not to exceed the 250-pound maximum limit usually placed on pieces of baggage, Cutler-Hammer 1000-watt slider dimmers are used, as these are very small and compact and answer their purpose admirably for use for traveling shows. These

dimmers are made in two sizes, 1000 and 300 watts. Where the control circuits require a dimmer of greater capacity than 1000 watts, the standard round plate dimmers are used.

Each case is made special for the producing company ordering it and is fully equipped with dimmers, fuses and switches, so as to fulfill all the lighting requirements of the producing company. A typical dimmer box is the one shown in the accompanying illustration,



Cutler-Hammer Slider Type Dimmers of 300 and 1,000 watt capacities

which is built in two sections for the Joe Weber Honeydew Company. This switchboard dimmer box handles the entire equipment of lights for this company and the house switchboard is used only to take care of the auditorium lights.

Westinghouse Publications

"The Safety Switch" is the title of a house organ, which has just been issued by the Westinghouse Electric & Manufacturing Company for the employes of its Krantz Works at Brooklyn, New York.

This company also has a new monthly house organ called "The Meter" for its employes at the Newark Works, where measuring instruments, electric fans and recticons are manufactured. This publication is similar to the Westinghouse Electric News, published at East Pittsburgh, and the Westinghouse Machine News, published at the South Philadelphia Plant.

Circular 7A-C-2 has been issued by the Westinghouse Electric & Manufac-

turing Company, George Cutter Works, South Bend, Indiana, describing and illustrating the Westinghouse Luxsolite Fixtures for street lighting. Style numbers and data on these fixtures, together with prices are given.

The 32-volt power stand, manufactured by the Westinghouse Electric & Manufacturing Company, is illustrated and described in Folder No. 4448, entitled "Do Your Chores Electrically," just issued. This folder includes a mailing card, which can be imprinted with the name of the dealer.

Ajax Plural Plugs

No. 22 Double Socket and No. 33 Triple Socket Plugs are manufactured by the Ajax Electric Specialty Company of St. Louis.

Difficulty has been experienced in the former method of molding directly on the frames. In these new types this difficulty is eliminated by using separate husks molded of high heat resisting compound.

The company has experienced an unprecedented demand for the Ajax Plural Socket Plug which it has not been able to take care of on the former method of manufacture. The new process will eliminate all difficulties of manufacture and render defects an impossibility.

The Ajax Plural Socket Plug is the only device of this character on the market in one piece that allows the lamp to remain in the position it is intended, allows the use of ordinary stock shade holders, and places the side socket at a 45 degree angle, making it

convenient for the appliance connection to not interfere with the shade holder or shade on lower socket, and leaving the assembly of pleasing appearance.

Those that have been disappointed in the past may rest assured they can secure good deliveries on all their demands from March 1, and thereafter, and that orders now on file will be filled with the new goods before that date.

Condensed Notes of Interest to the Trade

What is termed the "Right Book" outlines the advertising plans of the National Lamp Works, Nela Park, for the first six months of the year. It offers inducements for the dealer to tie-up with the company's national advertising campaign.

The American Wiremold Company, Hartford, Conn., in a circular letter, requests the names of contractors who use that company's material, so that notices of price changes may be promptly sent direct to users.

C. L. Warick Co., electric lamp specialists, recently removed to larger quarters at 112 West 42nd Street, New York City. Increased business demanded the change.

The Baltimore Electrical Supply Company, 307 North Calvert Street, Baltimore, Md., has issued a new general catalog of eleven hundred pages. While it is a complete reference book of standard electrical supplies, it also contains valuable data and information for ready reference. The company will



Offices of the Louisville Bedding Company of Louisville, Kentucky, Lighted With Ornamental Denzars, Manufactured by the Beardlee Chandelier Manufacturing Company, Chicago

send a copy of this new catalog to anyone in the electrical business that may be interested.

Forty-six members of the Beardslee Chandelier Manufacturing Company, Chicago, attended the company's annual dinner at the La Salle hotel in that city in January, Fred R. Farmer, president of the company, acting as toastmaster. W. R. Abbott of the Illinois Bell Telephone Co., one of the Beardslee directors, spoke on the anticipated building boom.

Crescent Electric Co., Dubuque, Iowa, has expanded to the extent of opening a special appliance department under the management of P. D. Carson, an experienced merchandising man from Peoria, Illinois.

F. C. Reed, formerly manager of the Price Section, of the Industrial Department, Westinghouse Electric and Manufacturing Company, has been placed in charge of the Bluefield and Charleston, West Virginia, offices of that company, located in the Charleston office.

The will to learn is being fittingly demonstrated by the workers of the electrical industry. Nearly 1,500 employees of the Western Electric Company are attending the educational courses which are being conducted at the many branches of the company throughout the country. What makes the figures particularly interesting is the fact that attendance at the schools is entirely voluntary.

The entire sales force of the Electric Appliance Company, Chicago, held a very successful sales conference in January. Sales managers of nationally known electrical manufacturers were invited to talk to the men. The object of the meeting was to better familiarize the men with the material they sell and subsequently to be able to give the dealer better service.

C-H Electrically Operated Brakes are described and illustrated in a new booklet published by The Cutler-Hammer Mfg. Co., of Milwaukee, Wis. Publication 850, as the booklet is known, takes up shoe brakes for both direct and alternating current service. Tables give dimensions and ratings of each type of brake, and it is explained how the correct size of brake for any particular installation may be calculated.

Frank Conrad, consulting engineer of the Westinghouse Electric & Manufacturing Company, has been appointed

assistant chief engineer. Mr. Conrad has been connected with the Westinghouse Company for almost thirty years, as he joined the company when it was in its first location at Garrison Alley.

The Bryant Electric Company announces the appointment of Robert M. Eames as General Sales Manager to fill the vacancy caused by the resignation of Frank V. Burton. Mr. Eames has been active in the Sales Organization of The Bryant Electric Company for fifteen years and for the last few years has been its export manager.

J. L. McQuarrie, Assistant Chief Engineer of Western Electric Co., laboratories, New York City, who has just returned from the Orient, was decorated by the Emperor of Japan before he sailed for home. C. H. Minor, General Manager of the China Electric Co., one of the Western Electric's foreign subsidiaries, has been decorated by the president of the Republic of China.

The Adamson Mfg. Company, East Palestine, O., has added a new department for manufacturing all kinds of storage, pneumatic and pressure tanks, welded pipe, battery casings, evaporators, condensers and a large line of arc-welded products.

The Schimmel Electric Supply Company, now located at 318 Market Street, Philadelphia, has purchased the building at 526 Arch Street. It is a six story building 30 feet x 200 feet, and together with the basement has a floor space of 42000 square feet. After extensive alterations the building will be equipped as a wholesale electrical supply house, with all the modern facilities

to take care of the expansion of the company.

Nine hundred fifty members of the Veteran Employes' Association of the Westinghouse Electric & Manufacturing Company attended the eighth annual banquet in Pittsburgh on Saturday night, January 29. This association includes in its membership both men and women, and now has a roll of over 1200 members.

Employes of the Western Electric Company, to the number of 6,170 have taken advantage of the plan and its extension which was announced recently, to permit them to purchase the new five year 7 percent convertible gold bonds issued by the corporation. They have subscribed to date for a total of over \$2,600,000 worth of the securities. The figures show that about one employe in every six is buying the bonds. The average subscription is about \$425.

Two Useful Books

"Storage Batteries" by C. J. Hawkes, and "Elementary Lessons in the Mathematics of Electricity," by R. W. Kent, are two useful books recently issued by the Wm. Hood Dunwoody Industrial Institute, Minneapolis, Minnesota.

From time to time the Institute issues books which it believes will be of interest to the trade. They are usually worked out at the school by competent instructors in the form of lesson sheets before being published, as is the case with these two books.

Send to National Headquarters for information on the New Business Record.



Appropriate Patriotic Window Display for Memorial Day, Fourth of July, or Other Patriotic Celebrations, Suggested by Edison Lamp Works, Harrison, New Jersey